

## DOWNTOWN ACTIVE TRANSPORTATION NETWORK ENGAGEMENT SUMMARY

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### 1.1 STAKEHOLDER IDENTIFICATION

At the beginning of the project, the Administration mailed letters to approximately 1,170 Downtown property owners, businesses and other stakeholder organizations introducing the project and asking interested recipients to add their names to a contact list for future project updates. Stakeholders who opted in for updates, as well as several targeted stakeholders such as organizations representing health care professionals, cyclists, pedestrians, and older adults, were invited to attend two separate stakeholder meetings (January 30<sup>th</sup> and March 1<sup>st</sup>). Invitations to attend were emailed to more than 120 stakeholders. The Downtown Business Improvement District also shared the invitation with 180 recipients on their contact list.

### 1.2 ENGAGEMENT EVENTS OVERVIEW

Below is an overview of the engagement events that took place for the Downtown Active Transportation (AT) Network Study.

#### 1.2.1 Active Transportation Advisory Group – January 18<sup>th</sup>, 2018

An overview of the content to be presented to stakeholders on January 30<sup>th</sup> was provided to ATAG for their comments. The feedback received at this meeting was supportive of the overall approach to the Downtown AT Network Study.

#### 1.2.2 Open House – January 30<sup>th</sup>, 2018

The first stakeholder engagement event comprised two open house sessions at TCU Place, each approximately 90 minutes in length. The format included a brief presentation followed by a series of informational boards and engagements activities. The intention of the event was to:

- Describe the principles that form the basis for the importance of an AT network;
- Obtain input on the factors used to complete the assessment;
- Hear thoughts about challenges and opportunities for each street.

The sessions were attended by between 40 and 50 stakeholders in total.

#### 1.2.3 Active Transportation Advisory Group – February 15<sup>th</sup>, 2018

The results of the stakeholder workshop on January 30<sup>th</sup> was presented and an overview of the content to be presented to stakeholders on the March 1<sup>st</sup> meeting was provided to ATAG for their comments.

#### 1.2.4 Stakeholder Workshop – March 1<sup>st</sup>, 2018

A second stakeholder workshop was offered in two sessions at Le Relais Hall. The event included a brief presentation, followed by an opportunity to view information boards and ask questions. The purpose of this event was to:

- Describe how the assessment was informed by both the technical analysis and stakeholder input;
- Share the results of the evaluation of the Downtown streets; and
- Present the recommended Downtown AT network.

Approximately 20 people attended.

#### **1.2.5 Public Open House – March 7<sup>th</sup>, 2018**

A public open house was held in conjunction with the Plan for Growth Community Open House at the Western Development Museum. The purpose of this event was to present the Downtown AT Network and discuss the study's process with the public.

Approximately 400 people attended the Community Open House.

#### **1.2.6 Active Transportation Advisory Group – October 10<sup>th</sup>, 2018**

An overview of the content to be presented to in the next phase of engagement was provided to ATAG for their comments. The feedback received at this meeting was supportive of the overall approach to the Downtown AT Network Study.

#### **1.2.7 Downtown Come-and-Go Community Event – November 6<sup>th</sup>, 2018**

A come-and-go community event was held at the Hilton Garden Inn in conjunction with BRT. The purpose of the event was to provide Downtown stakeholders with an opportunity to see preliminary concept designs that illustrate how the proposed network corridors will look and to obtain feedback on the routes selected, including asking attendees to indicate a preference between a north-south AT route on 3<sup>rd</sup> Avenue or 4<sup>th</sup> Avenue.

Approximately 73 people attended the event.

#### **1.2.8 Broadway Come-and-Go Community Event – November 8<sup>th</sup>, 2018**

A come-and-go community event was held at the Emmanuel Anglican Church in conjunction with BRT. The purpose of the event was to provide stakeholders and residents of the Broadway area with an opportunity to see preliminary concept designs that illustrate how the proposed network corridors will look and to obtain feedback on the routes selected, including asking attendees to indicate a preference between a north-south AT route on 3<sup>rd</sup> Avenue or 4<sup>th</sup> Avenue.

Approximately 216 people attended the event.

#### **1.2.9 Midtown Plaza Pop-Up – November 16<sup>th</sup>, 2018**

A pop-up event was held at Midtown Plaza in conjunction with BRT. The purpose of the event was to provide people who were already spending time Downtown with an overview of the proposed network and the preliminary concept designs for the network.

Approximately 76 people were engaged at the pop-up event.

#### **1.2.10 Saskatoon Accessibility Advisory Committee – January 11<sup>th</sup>, 2019**

Information was provided and a presentation was made to the Saskatoon Accessibility Advisory Committee on the proposed design for accessible parking/loading zones adjacent to Downtown corridors with AT facilities.

#### **1.2.11 Saskatchewan Human Rights Commission – February 26<sup>th</sup>, 2019**

Information was shared with the Director of Systemic Issues at the Saskatchewan Human Rights Commission on the proposed design for accessible parking/loading zones adjacent to Downtown corridors with AT facilities.

### **1.3 DOWNTOWN AT NETWORK: STAKEHOLDER EVENT #1**

See Attachment 1 for a summary prepared by Fast Consulting on the Stakeholder Engagement Event #1.

### **1.4 DOWNTOWN AT NETWORK: STAKEHOLDER EVENT #2**

#### **1.4.1 Engagement Objectives**

- Provide an overview on the project and Saskatoon's wider network;
- Describe how the technical analysis and stakeholder input informed the development of the Downtown AT network;
- Share the results of the evaluation of the Downtown streets; and
- Present the recommended Downtown AT network.

#### **1.4.2 What We Asked**

Approximately 14 display boards were set up and manned by project staff. Staff discussed the content of the boards with attendees and answered questions. The boards contained the following information:

- Why Active Transportation is important in Saskatoon, including information on the Council endorsed plans supporting AT initiatives: Growth Plan, Active Transportation Plan, and Compete Streets Design and Policy Guide.
- What types of cycling facilities are considered when planning an AT network, including what types of facilities are considered All Ages and Abilities, and which are not, and a description of what makes a facility appropriate for people of all ages and abilities.
- The results of the evaluation of all streets considered for AT facilities was communicated, including consideration for other users and uses along these corridor such as transit, people driving, and businesses. A rationale for why the recommended streets were selected was also provided.
- A map of the proposed Downtown AT network was provided, as well as how this network would connect to existing and future AT facilities beyond the Downtown.

#### **1.4.3 What We Heard**

Approximately 20 people attended one of two sessions (presentations at 4:30pm and 6:00pm) for the proposed AT network, on March 1, 2018 at the Le Relais Hall. Feedback and comments from participants was generally positive. Although different people have different preferences for AT corridors, most participants suggested that the network presented at the session is the best selection that could be done given all of the things that the City had to weigh in the balance in terms of network planning, design consideration and other evaluation and decision-making criteria. Some people attending the session had suggestions around messaging that the City could consider, including messages around equity (not everyone in Saskatoon has a motor vehicle) and the importance of options for safe cycling for the quality of life of citizens. There is confidence among participants that the popularity of AT facilities will continue to increase as they are adopted and used by more and more residents.

#### **1.4.4 Summarized Comments**

##### **Design**

- Like the design, including the 'design bends' at intersections along 4<sup>th</sup> Ave to help cyclists be more visible to motor vehicles turning right from their lanes across the bike paths.
- I'd like to see a curb between the bike lane and the cars

## **Positive**

- Great east west corridor route selection, especially 19<sup>th</sup> Street, which brings the PBL alongside the new River Landing development, the Remai Modern Art Gallery, the Farmer's Market and the new condo developments there.
- There is bike parking in the City of Saskatoon parkade under the Art Gallery alongside 19<sup>th</sup> Street corridor.
- Like that we are not losing motor vehicle lanes along 19<sup>th</sup> Street because it is already wide enough to accommodate PBL's, lanes for motor vehicles and parking.
- Like that Idylwyld was selected for north south corridor – makes good sense for this newly redesigned and repurposed Idylwyld corridor, from a highway running through the centre of Downtown, to a more bike and pedestrian friendly corridor (under the 'Imagine Idylwyld' initiative/strategy), even though the planners will have to figure something out for the connection between 19<sup>th</sup> St and Idylwyld via Avenue A.
- We're spending money on redeveloping Idylwyld anyway under the new plan for this corridor, so selecting it for the north south corridor of the PBL makes a lot of sense.
- I like the connections and am excited about the improvements to the connections that are part of the cycling corridor presented today.
- It will be important to make connections to transit work for cyclists.
- I think more people bike Downtown than Downtown businesses realize – they might be getting customers who walk into their stores, but after they cycled to work at their office.
- Good connectivity.

## **Other Options**

- I would have preferred 1<sup>st</sup> Ave, but I'm also ok with the corridor selected by the consultants on the basis of the decision-making criteria that they used.
- I would have preferred 3<sup>rd</sup> Ave to 4<sup>th</sup> Ave – understand that the City took this option out of the mix because of the BRT potentially going there, but don't agree that this is the way to go. I'm not optimistic that we can build the necessary critical mass of residents choosing to use transit to make BRT a positive thing for our city – I think it will be very disruptive.
- I would have preferred the PBL be located on Spadina, which does not have any of the traffic lights at intersections that interrupt east-west travel.
- Important to ensure accessible transit stops are provided

## **Maintenance is Important**

- The City seemed to do a great job of keeping the pilot PBLs along 4<sup>th</sup> Ave and 23<sup>rd</sup> St clear of snow on a regular/continual basis.
- Some businesses along 4<sup>th</sup> Ave are clearing the snow from their sidewalks, as required by law, but moving it into the PBLs alongside the sidewalk, which then makes it difficult for bikes to use the lanes. Snow can be moved from sidewalks to the road where it is then moved by the City, but businesses should be reminded not to put it into the PBLs after they have already been cleared by the City.
- The exact details of the new PBL do not matter to me – it's just great to have it.
- Snow clearing at night makes noise and disrupts Downtown residents.

## Messaging

- Citizens should be reminded that the cost of the PBL is very small compared to the cost of road building and maintenance – that it is a great investment for citizens relative to its cost and the benefits that it brings to Saskatoon.
- Initiatives like the PBL are important to attract people to our city and keep them here – having these types of amenities are important for the quality of life of people living here and keeps us competitive with other cities such as Calgary that have PBL networks to help people without motor vehicles move around.
- PBLs are criticized for slowing traffic in the Downtown core and other corridors with high traffic. But bikes can legally use motor lanes, so what if messages that were developed that show that PBLs actually help traffic flow by keeping cyclists out of motor vehicle lanes?
- The presentation today indicates that traffic delays for motorists at peak times as a result of PBLs for cyclists are nominal – a few minutes at worst. Can this be messaged to public?
- We need the type of cyclist counters used in Calgary and we need to celebrate usage milestones to reflect back to residents of Saskatoon the positive aspects of having PBLs.
- COS employees, especially planners, should be encouraged to forgo using motor vehicles to commute to their workplace Downtown and use the PBLs.

## Future Considerations

- May have to start posting and enforcing speed limits in the PBLs as the popularity of electric bikes, most of which travel at speeds exceeding 40kms per hour, seems to be taking off in Saskatoon.
- Biking of all forms is significantly less costly than owning and operating motor vehicles, and cycling will become more and more popular in the future as a result.
- I'd like to see bicycle signals added for safety

### 1.4.5 Boards

**Active Transportation in Saskatoon**

The Growth Plan to Half a Million (Growth Plan) was developed over two and a half years through a process called Growing Forward Shaping Saskatoon. The Growth Plan is made up of several themes that, when put together, form a new growth model for Saskatoon.

- **Connect Growth** - Encouraging growth and development near our existing major centres
- **Transportation** - Improving transportation options for people as we grow
- **Community Places** - Making the most of our existing road infrastructure
- **Environment** - Ensuring that as we grow we have the right amount of employment in the right areas
- **Access** - Creating a variety of safe, accessible choices for how people move around the city
- **Planned Growth** - Planning ahead for the coming decades

Adopted in principle by City Council on April 25, 2016, the Growth Plan is about making choices to manage growth in a way that protects the environment, grows a healthy economy, and creates a great place to live. Growing Forward Shaping Saskatoon aims to create a diverse mix of housing, commercial, social, cultural, and recreational opportunities that are easily accessible by all modes of transportation, including walking, cycling, transit, and driving.

**Active Transportation (AT) Plan | Bicycle Network Principles**

AT Plan Network Facility Types	City Wide Cycling Network Principles
	A well-designed cycling network needs to be visible, intuitive and provide connections between destinations and neighbourhoods. Ideally, a cycling network serves users of all ages and abilities – in other words, people from age 8 to age 80 – offering practical route options for those who are interested in cycling, but who may not be comfortable riding on busy streets with high traffic volumes and speeds. The design and development of a long-term bicycle network for Saskatoon is based on five network planning principles: <ol style="list-style-type: none"><li>1 Provide an interconnected system of facilities that is <b>COMFORTABLE</b> and attractive for all users.</li><li>2 Increase <b>COVERAGE</b> to ensure all residents are within 400m of a designated bicycle route. The designated route may include both AAA and non-AAA facilities.</li><li>3 Focus on high-quality <b>CONNECTIONS</b> to and from downtown with all areas of the city and create a downtown network.</li><li>4 Provide a network that provides direct <b>ACCESS</b> to major shopping centres, key employment areas, schools, and recreational areas/facilities.</li><li>5 <b>IMPROVE</b> and connect to existing cycling routes.</li></ol>

All Ages and Abilities (AAA) Bicycle Network Principles	
<h2 style="color: #80B000;">SAFETY</h2> <p>People riding bicycles are vulnerable road users because they have less protection and travel more slowly than motor vehicles.</p>	<h2 style="color: #80B000;">COMFORT</h2> <p>Attention to user comfort is an important part of attracting more people to bicycling as a mode of travel.</p>
<p>An All Ages and Abilities Network should:</p> <ul style="list-style-type: none"><li>✓ Minimize and de-escalate conflict points between drivers (for example, at intersections or driveway crossings).</li><li>✓ Reduce speed and enhance visibility at intersections and conflict points.</li><li>✓ Provide each mode with a clearly defined space for travel.</li><li>✓ Provide consistent treatments to promote predictable behavior for all users.</li><li>✓ Ensure facilities are easy to maintain to facilitate safe cycling conditions.</li></ul>	<h2 style="color: #80B000;">CONNECTIVITY</h2> <p>People who ride bicycles need a network of continuous low-stress routes that provide connections to local and city-wide destinations.</p>
<p>An All Ages and Abilities Network should:</p> <ul style="list-style-type: none"><li>✓ Separate bicycles from motor vehicles when speeds are over 30 mph and traffic volumes exceed 1,500 vehicles per hour.</li><li>✓ Ensure the amount of delay for people riding bikes is reasonable and balanced with other users.</li><li>✓ Minimize encounters between people riding bikes and those driving vehicles.</li><li>✓ Accommodates side by side cycling and passing movements, where feasible.</li><li>✓ Provide smooth vertical transitions and pavement surfaces free from obstructions.</li></ul>	<p>An All Ages and Abilities Network should:</p> <ul style="list-style-type: none"><li>✓ Provide direct and convenient connections that minimize detours.</li><li>✓ Connect to local and city-wide destinations.</li><li>✓ Integrate into the larger multimodal transportation network.</li><li>✓ Provide seamless transitions between different types of cycling facilities (for example: from a raised cycle track to a multi-use pathway).</li><li>✓ Ensure key destinations and regional routes are interconnected with the bicycle network.</li></ul>

**EXAMPLES OF DESIGN CONSIDERATIONS**

Integration with other uses of the street is important to the successful function of the street. Conflicts between users are inevitable, but design treatments can be applied to ensure all users can safely navigate the space.

**RIGHT-TURNING VEHICLES**

• Lane markings clearly define the area of conflict and provide clear visual cues for drivers.

**LOADING ZONES / ACCESSIBLE PARKING SPACES**

• No intersection conflicts with delivery vehicles or accessible parking spaces.

**RAISED TRANSIT PLATFORMS**

• Raised platforms provide better visibility for drivers and passengers, and clearly delineate the travel space.

The diagram illustrates three types of AAA facilities:

- ONE-WAY PROTECTED BIKE LANE:** Shows a single-direction bike lane separated from traffic by a concrete barrier. It includes a green buffer zone, a paved shoulder, and a two-lane car path.
- ONE-WAY RAISED CYCLE TRACK:** Shows a raised concrete platform for cyclists, with a green buffer zone, a paved shoulder, and a two-lane car path.
- BI-DIRECTIONAL PROTECTED BIKE LANE:** Shows a double-direction bike lane separated from traffic by a concrete barrier. It includes a green buffer zone, a paved shoulder, and a two-lane car path.

Each facility type is accompanied by a cross-section diagram and a top-down view of the street layout.

**PROJECT TIMELINE**

**PHASE 1**

- High level review of all potential downtown streets
- Develop evaluation criteria
- Present progress to stakeholders

January 30<sup>th</sup> Event

**PHASE 2**

- Identify promising streets for AAA network
- Develop Downtown AAA cycling network
- Present progress to stakeholders
- Present progress to public

March 1<sup>st</sup> Event

March 7<sup>th</sup> Event

**PHASE 3**

- Conduct comprehensive data collection for all evaluated criteria on all promising streets
- Use industry standard traffic modeling software to quantify traffic operation impacts of cycling facility on all promising streets
- Design
- Report to City Council

June 2018

Determine the appropriate facility type using industry guidelines and previous

**PROPOSED AAA NETWORK**

- Proposed AAA Network (Orange line)
- Existing Bicycle Facilities
- Shared-Use On-Road Cycling Lane (Green dashed line)
- Cycle Track (Solid green line)
- Bike Boulevard (Dotted green line)
- Multi-Use Trails or Pathways (Dashed green line)
- Local Roads (Grey line)
- Exclusive Bike Lanes (Blue line)
- Sharrows Lane and Narrow Lanes (Dotted blue line)
- On Road, Sharing the Road or Bike Route (Dashed blue line)
- Expert Riders - Street with high speed and high volume of traffic (Black line)

**TRAFFIC LEVEL OF SERVICE & TRAVEL TIME ANALYSIS [PM PEAK PERIOD]**

The City of Saskatoon uses the Highway Capacity Manual (HCM) to determine Level of Service (LOS). LOS is a measure of average delay per motor vehicle at each intersection. The illustrations below show the change in LOS at each intersection and the change in travel time for each corridor when a AAA facility is added to the street.

Street	Peak Direction	LOS existing	LOS existing + AAA configuration	Total corridor travel time	Change in corridor travel time
24 <sup>th</sup> Street Peak Direction: EB	E-B	B	B	1.45 min.	2.14 min.
23 <sup>rd</sup> Street Peak Direction: W-E	W-E	B	B	1.59 min.	2.03 min.
22 <sup>nd</sup> Street Peak Direction: W-E	W-E	B	B	1.59 min.	2.34 min.
20 <sup>th</sup> Street Peak Direction: WB	W-B	B	B	1.45 min.	2.40 min.
19 <sup>th</sup> Street Peak Direction: WB	W-B	B	B	1.43 min.	2.43 min.
<b>1<sup>st</sup> Avenue</b> Peak Direction: NE-SW	N-E	B	B	0.82 min.	1.17 min.

**Legend:**  
 Road Configuration with AAA facility:  
 Red = 4-directions with left turn lanes  
 Blue = 2-directions with left turn bays  
 Purple = 2-directions (no left turn bays)  
 Green = 2-directions (no turn lanes)

**Level of Service**

Level of Service	Average Delay per Vehicle [min/km]
A	< 10 - 20
B	20 - 35
C	35 - 55
D	55 - 80
E	> 80

**Traffic Analysis Assumptions:**

- Input speed on 23<sup>rd</sup> street is 80 km/h per hour, through traffic is 1000 vehicles per hour, turning traffic has been added.
- Highway B is open.
- Highway A is closed.
- Highway C is closed.
- AAA facility is located on 23<sup>rd</sup> street along 1 km of analysis due to development.
- AAA facility is located on 23<sup>rd</sup> street along 1.5 km of analysis due to development.
- AAA facility is located on 23<sup>rd</sup> street along 2.25 km of analysis due to development.
- AAA facility is located on 23<sup>rd</sup> street along 2.45 km of analysis due to development.
- AAA facility is located on 23<sup>rd</sup> street along 2.75 km of analysis due to development.

PROPOSED AAA NETWORK: Overview of Network Decision Making						
Downtown streets support a number of different land uses through a variety travel modes. When assessing the appropriate streets for a AAA cycling facility, it's important to consider the impacts to all users in the Downtown.						
The charts below provide a high-level overview of the detailed analysis for each of the streets considered for a AAA facility.						
<b>East – West Streets</b>				<b>North – South Streets</b>		
Cycling 	19th Street 	20th Street 	22nd Street 	23rd Street 	24th Street 	
Motor Vehicles 						
Business 						
Transit 						

Using the proposed design approach, 14 of these streets were identified as priority candidates.

TRAFFIC ANALYSIS ASSUMPTIONS						
- 19th Street: 23rd Street is no longer present, through traffic movements along 23rd Street have been added.						
- Traffic: Midday (1pm)						
- Parcel YY in River Landing will built our (increase in traffic due to development).						
- Bus Rapid Transit (BRT) along 3rd Ave. all employees take into account the changes in travel pattern in the downtown.						

AAA EVALUATION CRITERIA: COMPARISON OF NORTH-SOUTH STREETS						
	Streets Recommended for Downtown AAA Network	Great/Good	Neutral	Poor		
	Idylwyld Drive	1st Avenue	2nd Avenue	3rd Avenue	4th Avenue	Spadina Cres
<b>BICYCLE NETWORK</b>						
		Linkages to Surrounding Areas				
Connectivity North	Great: Extends beyond 25th St.	Good: Extends beyond 25th St. with a slight detour down Duke St.	Great: Extends beyond 25th St.	Great: Extends beyond 25th St.	Good: Extends beyond 25th St (4th Ave in one way street N of 25th)	Good: Extends north of 25th St. Connects with Meadowood trail system
Connectivity South	OK: Terminates at 20th, connects to 19th St through Ave A to 19th St	OK: Southbound connection to 19th Street, Northbound begins at 20th due to Idylwyld Freeway Ramps.	Great: Terminates at Spadina Cres	Great: Terminates at Spadina Cres	Intersection improvements are planned that will improve the connection to the Broadway bridge	Good: Terminates 2nd Ave. Connects with Meadowood trail system
Coverage (% of downtown within 400m of proposed facility)	40%	65%	75%	75%	70%	55%
		Linkages to Existing & Proposed AAA Facilities				
Bridges	Poor: Road connects directly to 5th Buckwold Bridge, but the connection to the Buckwold Bridge walkway is challenging.	Poor: Road connects directly to 5th Buckwold Bridge, but the connection to the Buckwold Bridge walkway is challenging.	OK: Connects to 19th St which connects to Traffic Bridge and Broadway Bridge	Great: Connects directly to Traffic Bridge	Good: Northbound connection from Broadway Bridge to 4th on East Broadway	Good: Connects with University Bridge. Doesn't connect with Broadway Bridge. Connects with Traffic Bridge
Existing AAA Facilities	• Connects with Biomare Bikeway • Connects with South-West Connector Multi-Use Pathway	None	2nd Ave becomes 3rd Ave which continues as 3rd Street Multi-Use Pathway	• Connects with 3rd Street Multi-Use Pathway • Connects with Cycle Track on Victoria Avenue	None	Connects to Meadowood trail system
Proposed AAA Facilities	None	None	None	None	None	None
<b>Current and Potential Bicycle Traffic</b>						
Key Destinations Served	• Midtown Plaza • TCU Place	• Government of Canada Building • Midtown Plaza • Scotia Centre	• Riverfront • River Landing • St. Paul's • St. Paul's Hospital • St. Paul's Centre • Lots of retail • Lots of restaurants	• Francis Morrison Library • City Hall • St. Paul's • Some retail shops • Some restaurants • Educational institutions	• Francis Morrison Library • City Hall • St. Paul's • More office space set aside • Some restaurants	• Remai Modern • River Landing • Court of Queen's Bench • Medical Offices • General Offices
<b>PEOPLE WALKING</b>						
		Pedestrian Improvements				
Opportunity for Improvements	Yes. Opportunity to make improvements through Imagine Idylwyld project	Yes. Opportunity to improve crossings for pedestrians north of 22nd St	Already a pedestrian priority street with significant crosswalks, amenities & short crossing distances.	Yes. Possible opportunity to make improvements through BRT	Yes. Increased separation of pedestrians from traffic	East side has great pedestrian infrastructure West side could benefit from improved pedestrian facilities

AAA EVALUATION CRITERIA: COMPARISON OF NORTH-SOUTH STREETS						
Streets Recommended for Downtown AAA Network		Great/Good		Neutral		Poor
	Idylwyld Drive	1st Avenue	2nd Avenue	3rd Avenue	4th Avenue	Spadina Cres
<b>BICYCLE NETWORK</b>						
Linkages to Surrounding Areas						
Connectivity North	Great. Extends beyond 25th St.	Good. Extends beyond 25th St. with a slight detour at Duke St.	Great. Extends beyond 25th St.	Great. Extends beyond 25th St.	Good. Extends beyond 25th St. Ave in a one-way street N of 25th St.	Good. Extends north of 25th St. Connects with Mowat trail system.
Connectivity South	Ok. Terminates at 20th connection through Ave A to 19th St.	Ok. Southward extension begins at 19th Street. Not northbound begins at 2nd due to idylwyld freeway ramps.	Great. Terminates at Spadina Cres	Great. Terminates at Spadina Cres	Improvements are planned that will improve the connection to the Broadway Bridge	
Coverage (%) of Downtown within 40m of Proposed Facility)	40%	65%	75%	75%	70%	55%
Linkages to Existing & Proposed AAA Facilities						
Bridges	Poor. Road connects directly to 1st Buckwold Bridge but the connection to the Buckwold bridge walkway is challenging.	Poor. Road connects directly to 19th St which connects to Traffic Bridge and Broadway Bridge	Good. Connects directly to Traffic Bridge	Good. Connects directly to Traffic Bridge	Good. Northbound connection from Broadway Bridge to 4th on East side of intersection. Improvements are planned that will improve the connection to the Broadway Bridge	Good. Connects with University Bridge. Doesn't connect with Broadway Bridge.
Existing AAA Facilities	• Connects with Bloormore Bikeway • Connects with South West Connector Multi Use Pathway	None	2nd Ave becomes 3rd Ave which connects to 3rd Street Multi Use Pathway	Connects with 33rd Street Multi Use Pathway. Connects with Cycle Track on Victoria Avenue	None	Connects to Mowat trail system
Proposed AAA Facilities	None	None	None	None	None	None
Current and Potential Bicycle Traffic						
Key Destinations Served	• Midtown Plaza • TCU Place	Government of Canada Building • Midtown Plaza • Scotia Centre	Riverside Modular Library • River Landing • City Hall • Study Store • Some retail shops • Some restaurants • Educational institutions	Riverside Modular Library • River Landing • City Hall • Study Store • Some retail shops • Some restaurants • Educational institutions	François Morin Library • St. Catharines • Stone More office than residential units. Some restaurants	Ramona McLean Library • City Hall • Stone More office than residential units. Some restaurants
<b>PEOPLE WALKING</b>						
Pedestrian Improvements						
Opportunity for Improvements	Yes. Opportunity to make improvements through Imagine Idylwyld project	Yes. Opportunity to improve crossings for pedestrians: north of 22nd St	Already a pedestrian priority street with light traffic, protected amenities & short crossing distances.	Yes. Possible opportunity to make improvements through BRT	Yes. Increases separation of pedestrians from traffic	East side has great pedestrian crosswalks. West side could benefit from improved pedestrian facilities.

AAA EVALUATION CRITERIA: COMPARISON OF EAST-WEST STREETS						
	Streets Recommended for Downtown in AAA Network	Good/Good	Neutral	Poor		
	19th Street	20th Street	22nd Street	23rd Street	24th Street	25th Street
<b>BICYCLE NETWORK</b>						
		<b>Linkages to Surrounding Areas</b>				
Connectivity East	Good. Terminates at 4th Avenue	Great. Terminates at Spadina Cres.	Ok. Terminates at Spadina Cres, slight deflection south at 5th Ave	Great. Terminates at Spadina Cres	Great. Terminates at Spadina Cres	Great. Terminates at Spadina Cres
Connectivity West	Great. Continues west to Ave M	Great. Continues west to Vancouver Ave	Great. Continues west to City Limits	Great. Continues west to Vancouver Ave, slight deflection at Jamison St	Ok. Terminates at Idylwyld Drive	Ok. Terminates at Idylwyld Drive
Coverage (% of Downtown within 400m of Proposed Network)	35%	50%	65%	70%	60%	40%
		<b>Linkages to Existing &amp; Proposed AAA Facilities</b>				
Bridges	Great connection to Traffic Bridge & Broadway Bridge	No bridge connections	No bridge connections	Ok connection to University Bridge	Ok connection to University Bridge	Great connection to University Bridge
Existing AAA Facilities	None	None	None	Connects to Bloormore Bikeway	None	Connects to SW Connector MUP
Proposed AAA Facilities	Connects to proposed 19th St protected bike lane (Ave A - Ave M)	Connects to proposed raised cycle track on Idylwyld Drive	Connects to proposed raised cycle track on Idylwyld Drive	Connects to proposed raised cycle track on Idylwyld Drive	Connects to proposed multi-use pathway on Idylwyld Drive	Connects to proposed multi-use pathway on Idylwyld Drive
	<b>Current and Potential Bicycle Traffic</b>					
Key Destinations Served	River Landing • Remai Modern • Farmer's Market • Prov. Court • Midtown Plaza	Midtown Plaza • Sevenstones • shops west of Idylwyld Dr	TCL • Remai Modern • Party Store • Some office • retail	Francis Morrison Library • City Hall • Medical Offices	Kinsmen Park • City Hall	Kinsmen Park • Police Station
	<b>PEOPLE WALKING</b>					
	<b>Pedestrian Improvements</b>					
Opportunity for Improvements	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Somewhat. Already streetcapped

# AAA EVALUATION CRITERIA: COMPARISON OF EAST-WEST STREETS

Streets Recommended for Downtown AAA Network		Great/Good		Neutral		Poor	
		19th Street	20th Street	22nd Street	23rd Street	24th Street	25th Street
<b>CLYST SAFETY</b>							
Conflict with Vehicles							
<b>Motor Vehicles per Day (Average Annual Daily Traffic)</b>	17,000 - 25,000* *estimated	13,000 - 20,000* *estimated	15,000 - 30,000* *estimated	7,000 - 12,000* *estimated	8,000 - 13,000* *estimated	23,000 - 43,000 2016 CDS AADT	
<b>PEOPLE DRIVING</b>							
Automobile travel time [PM Peak Period]							
<b>Peak Direction of Travel</b>	Eastbound	Westbound	Westbound	Eastbound	Eastbound		
<b>Travel Time (existing configuration)</b>	1:43 min	1:48 min	2:13 min	1:59 min	1:40 min		
<b>Travel Time (AAA facility) Change in Travel Time</b>	2:35 min	3:42 min	3:24 min	2:01 min	2:44 min		
	0:52 sec	1:54 min	1:35 min	0:02 sec	1:04 min		
<b>TRANSIT</b>							
Transit Stop Conflicts							
<b>Current # of Stops</b>	5	3	4	9	2	9	
<b>Future # of Stops</b>	None Identified	Possibility of future stops 2 BRT Stations	2 BRT Stations	None Identified	None Identified	2 BRT Stations	
Transit Operations							
<b>Current Transit Route</b>	Yer	Yer	Yer	Current transit terminal conflict front 2nd Ave to 3rd Ave	Yer	Yer	
<b>Future Transit Route</b>	BRT proposed as curb running from 4th Ave to 3rd Ave	Identified as possible high- frequency transit route	Identified as future center-running BRT route	None Identified	None Identified	BRT proposed as curb running from Spadina to 3rd Ave	
<b>BUSINESS</b>							
<b>Street Environment</b>	Low activity; 7 building entrances (1.2 per block face)	Average activity; 23 building entrances (2.8 per block face)	Average activity; 21 building entrances (1.1 per block face)	Low activity; 21 building entrances (1.4 per block face)	Average activity; 23 building entrances (2.8 per block face)	Low activity; 24 building entrances (1.4 per block face)	
<b>Current # of Spaces</b>	17	118	96	103	124	58	
<b># of Spaces with AAA</b>	17	80	63	90 (Parking added in front hemispherical	66 (Space removed from 2nd Ave to 3rd Ave & removed 1st Ave)	50	
<b>Change in # of Spaces*</b>	0	-38	-33	-13	-58	-8	

## TRAFFIC ANALYSIS ASSUMPTIONS

- Transit Head on 23rd Street is no longer present. Through traffic movements along 23rd Street have been added.
- Traffic Bridge is open.
- Parcels YY in River Landing is built out (increase in traffic due to development).
- Bus Rapid Transit (BRT) along 3rd Ave: analysis take into account the changes in travel pattern in the downtown.

\* Due to removal of parking at intersections and on each side of driveways to improve visibility/sightlines.

## 1.5 DOWNTOWN AT NETWORK: COMMUNITY OPEN HOUSE ENGAGEMENT SUMMARY

### 1.5.1 Engagement Objectives

- Provide an overview on the project and Saskatoon's wider network;
- Describe how the technical analysis and stakeholder input informed the development of the Downtown AT network;
- Share the results of the evaluation of the Downtown streets; and
- Present the recommended Downtown AT network.

### 1.5.2 What We Asked

Approximately 14 display boards were set up and manned by project staff. Staff discussed the content of the boards with attendees and answered questions. The boards contained the following information:

- Why Active Transportation is important in Saskatoon, including information on the Council endorsed plans supporting AT initiatives: Growth Plan, Active Transportation Plan, and Compete Streets Design and Policy Guide.
- What types of cycling facilities are considered when planning a AT network, including what types of facilities are considered All Ages and Abilities, and which are not, and a description of what makes a facility appropriate for people of all ages and abilities.
- The results of the evaluation of all streets considered for AT facilities was communicated, including consideration for other users and uses along these corridor such as transit, people driving, and businesses. A rationale for why the recommended streets were selected was also provided.
- A map of the proposed Downtown AT network was provided, as well as how this network would connect to existing and future AT facilities beyond the Downtown.

### 1.5.3 What We Heard

Generally speaking, many attendees were supportive of a Downtown AT network and of the streets that were selected. Of those who supported the network, many agreed with the streets selected and supported the evaluation process used to arrive at those streets. Some comments were received around improving access at key entry points such as the bottom of the Broadway Bridge, ensuring good pavement quality in the lanes, and providing access through the existing transit terminal. Generally, those who were not supportive of the network were not supportive of any protected cycling facility within the Downtown, citing negative impacts to motorists, parking implications, underutilization of current bike lanes Downtown, and cost implications.

### 1.5.4 Boards

<p><b>Active Transportation in Saskatoon</b></p> <p>The Growth Plan to Half a Million Goals Plan was developed over two and a half years through a five-phase public engagement process called the Future Shaping Journey. The Growth Plan is made up of several themes that, when put together, form a new growth model for Saskatoon:</p> <ul style="list-style-type: none"><li>• Corridor Growth – Encouraging growth and investment along our major major corridors</li><li>• Transit – Making transit more accessible for people as we grow</li><li>• Complete Streets – Making the most of existing road infrastructure</li><li>• Employment Areas – Ensuring we have the right amount of employment in the right areas</li><li>• ACTIVE TRANSPORTATION – Providing more choices for walking and cycling</li><li>• Financing Growth – Putting ahead the costs of growth</li></ul> <p>Adopted by City Council on April 25, 2016, the Growth Plan is about making choices to proactively manage the changes associated with growth. Creating a vibrant and attractive future generation. A vibrant Saskatoon with a diverse mix of housing, commercial, social cultural, and recreational opportunities will be accessible by all modes of transportation, including walking, cycling, transit, and driving.</p> <p>This purpose of Saskatoon's Active Transportation Plan (AT Plan) is to increase transportation choices within the city and establish a long-term vision for active transportation. The AT Plan is aligned with the City of Saskatoon's existing strategic vision.</p> <p>The AT Plan identified five key goals for improving walking and cycling in Saskatoon:</p> <ol style="list-style-type: none"><li>1 MORE walking and cycling</li><li>2 SAFER walking and cycling</li><li>3 More PLACES for walking and cycling</li><li>4 Build a CULTURE for active transportation</li><li>5 ENCOURAGE other forms of active transportation</li></ol> <p>Approved by City Council on June 27, 2016, the AT Plan will help the City to implement future priorities. A vibrant Saskatoon with a diverse mix of housing, commercial, social cultural, and recreational opportunities will be accessible by all modes of transportation, including walking, cycling, transit, and driving.</p> <p>Adopted by City Council on October 22, 2016, the Compete Streets Policy and Design Guide will help Saskatoon to plan, design, operate and maintain streets that support the mobility and support movement of people of all ages and levels of mobility.</p>	<p><b>Active Transportation (AT) Plan   Bicycle Network Principles</b></p> <table border="1"><thead><tr><th>AT Plan Network Facility Types</th><th>City Wide Cycling Network Principles</th></tr></thead><tbody><tr><td><p><b>All Ages &amp; Abilities (AAA)</b></p><ul style="list-style-type: none"><li>• Serve and support existing and planned land use and built form context;</li><li>• Encourage people to travel by walking, bicycling and transit;</li><li>• Provide transportation options for people of all ages and abilities;</li><li>• Ensure the safety and security of urban streets;</li><li>• Create a network of streets that offers mobility choices;</li><li>• Provide opportunities for improved health and recreation to people in the community;</li><li>• Promote economic development through both businesses and residents;</li><li>• Create a sense of place along the street corridor.</li></ul><p>Adopted by City Council on October 22, 2016, the Compete Streets Policy and Design Guide will help Saskatoon to plan, design, operate and maintain streets that support the mobility and support movement of people of all ages and levels of mobility.</p></td><td><p><b>City Wide Cycling Network Principles</b></p><p>Ideally, a cycling network serves users of all ages and abilities – in other words, people from age 8 to age 80 – offering practical route options for those who are interested in cycling, but who may not be comfortable riding on busy streets with high traffic volumes and speeds.</p><p>The design and development of a long-term bicycle network for Saskatoon is based on five network planning principles:</p><ol style="list-style-type: none"><li>1 Provide an interconnected system of facilities that is COMFORTABLE and attractive for all users.</li><li>2 Increase COVERAGE to ensure all residents are within 400m of a designated bicycle route. The designated route may include both AAA and non-AAA facilities.</li><li>3 Focus on high-quality CONNECTIONS to end from downtown with all areas of the city and create a downtown network.</li><li>4 Provide a network that provides direct ACCESS to major shopping centres, key employment areas, schools, and recreational areas/facilities.</li><li>5 IMPROVE and connect to existing cycling routes.</li></ol></td></tr></tbody></table>	AT Plan Network Facility Types	City Wide Cycling Network Principles	<p><b>All Ages &amp; Abilities (AAA)</b></p> <ul style="list-style-type: none"><li>• Serve and support existing and planned land use and built form context;</li><li>• Encourage people to travel by walking, bicycling and transit;</li><li>• Provide transportation options for people of all ages and abilities;</li><li>• Ensure the safety and security of urban streets;</li><li>• Create a network of streets that offers mobility choices;</li><li>• Provide opportunities for improved health and recreation to people in the community;</li><li>• Promote economic development through both businesses and residents;</li><li>• Create a sense of place along the street corridor.</li></ul> <p>Adopted by City Council on October 22, 2016, the Compete Streets Policy and Design Guide will help Saskatoon to plan, design, operate and maintain streets that support the mobility and support movement of people of all ages and levels of mobility.</p>	<p><b>City Wide Cycling Network Principles</b></p> <p>Ideally, a cycling network serves users of all ages and abilities – in other words, people from age 8 to age 80 – offering practical route options for those who are interested in cycling, but who may not be comfortable riding on busy streets with high traffic volumes and speeds.</p> <p>The design and development of a long-term bicycle network for Saskatoon is based on five network planning principles:</p> <ol style="list-style-type: none"><li>1 Provide an interconnected system of facilities that is COMFORTABLE and attractive for all users.</li><li>2 Increase COVERAGE to ensure all residents are within 400m of a designated bicycle route. 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## Active Transportation in Saskatoon

The Growth Plan to Half a Million (Growth Plan) was developed over two and a half years through a five-phase public engagement process called Growing Forward Shaping Saskatoon.

The Growth Plan is made up of several themes that, when put together, form a new growth model for Saskatoon:

- Corridor Growth** – Encouraging growth and development near our existing major corridors
- Transit** – Making transit more attractive to more people as we grow
- Core Area Bridges** – Making the most of our existing urban areas and connecting them
- Employment Areas** – Ensuring we have the right mix of jobs in the right areas
- ACTIVE TRANSPORTATION** – Providing more choices for how people move around the city

**Principles** – Planning ahead for the costs of growth

Adopted in principle by City Council on April 25, 2018, the Growth Plan is about making choices to protect our natural environment while supporting growth, creating a city that is vibrant and attractive to future generations. A vibrant Saskatoon has a diverse economy, great places to live, cultural and recreational opportunities that are universally accessible by all modes of transportation, including walking, cycling, transit and driving.

The purpose of Saskatoon's Active Transportation Plan (AT Plan) is to increase transportation choices within the city and establish a long-term vision for active transportation that complements the City of Saskatoon's existing street network.

The AT Plan identified five key goals for improving walking and cycling in Saskatoon:

- 1 MORE** walking and cycling
- 2 SAFER** walking and cycling
- 3 More PLACES** for walking and cycling
- 4 Build a CULTURE** for active transportation
- 5 ENCOURAGE** other forms of active transportation

Adopted in principle by City Council on June 27, 2016, the AT Plan will contribute to increased transportation options by improving the accessibility, connectivity and safety of walking and cycling in Saskatoon, as the city grows to half a million people over the next 30 to 40 years.

## Active Transportation (AT) Plan | Bicycle Network Principles

### AT Plan Network Facility Types

### City Wide Cycling Network Principles

A well-designed cycling network needs to be visible, intuitive and provide connection between destinations and neighbourhoods.

Ideally, a cycling network serves users of all ages and abilities – in other words, people from age 8 to age 80 – offering practical route options for those who are interested in cycling, but who may not be comfortable riding on busy streets with high traffic volumes and speeds.

The design and development of a long-term bicycle network for Saskatoon is based on five network planning principles:

- Provide an interconnected system of facilities that is **COMFORTABLE** and attractive for all users.
- Increase **COVERAGE** to ensure all residents are within 400m of a designated bicycle route. The designated route may include both AAA and non-AAA facilities.
- Focus on high-quality **CONNECTIONS** to and from downtown with all areas of the city and create a downtown network.
- Provide a network that provides direct **ACCESS** to major shopping centres, key employment areas, schools, and recreational areas/facilities.
- IMPROVE** and connect to existing cycling routes.

## All Ages and Abilities (AAA) Bicycle Network Principles

### SAFETY

People riding bicycles are vulnerable road users because they have less protection and travel more slowly than motor vehicles.

An All Ages and Abilities Network should:

- Minimize and consolidate conflict points between modes (for example, at intersections or driveway crossings).
- Reduce speed and enhance visibility at intersections and conflict points.
- Provide each mode with a clearly defined space for travel.
- Provide consistent treatments to promote predictable behavior for all users.
- Ensure facilities are easy to maintain to facilitate safe cycling conditions.

### COMFORT

Attention to user comfort is an important part of attracting more people to bicycling as a mode of travel.

An All Ages and Abilities Network should:

- Separate bicycles from motor vehicles when speeds are over 30 km/hr and traffic volumes exceed 1,500 vehicles per hour.
- Ensure the amount of delay for people riding bikes is reasonable and balanced with other users.
- Minimize encounters between people riding bikes and those driving vehicles.
- Accommodate side by side cycling and passing movements, where feasible.
- Provide smooth vertical transitions and pavement surfaces free from obstructions.

### CONNECTIVITY

People who ride bicycles need a network of continuous low-stress routes that provide connections to local and city-wide destinations.

An All Ages and Abilities Network should:

- Provide direct and convenient connections that minimize detours.
- Connect to local and city-wide destinations.
- Integrate into the larger multimodal transportation network.
- Provide seamless transitions between different types of cycling facilities (for example: from a raised cycle track to a multi-use pathway).
- Ensure key destinations and regional routes are interconnected with the bicycle network.

## EXAMPLES OF AAA FACILITY TYPES

An all ages and abilities (AAA) facility is typically used on streets where:

- volume of vehicles is greater than 1,500 vehicles per hour, and
- operating speeds are over 30km per hour.

The following are three types of AAA facilities that are typically used in urban settings, such as downtown Saskatoon.

## EXAMPLES OF DESIGN CONSIDERATIONS

Integration with other users of the street is important to the successful function of the street. Conflicts between users are inevitable, but design treatments can be applied to ensure all users can safely navigate the space.

## PROJECT TIMELINE

**PHASE 1**

- High level review of all potential downtown streets
- Develop evaluation criteria
- Present progress to stakeholders
- January 30<sup>th</sup> Event
- Eliminate all streets that do not meet AAA Bicycle Network Principles (Safety, Comfort, Connectivity)
- Criteria must consider the impacts of all users in the downtown.

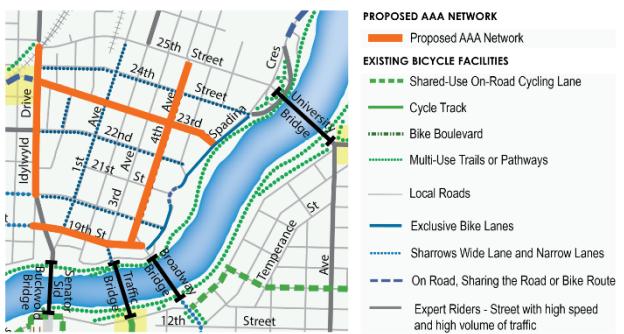
**PHASE 2**

- Identify promising streets for AAA network
- Develop Downtown AAA cycling network
- Present progress to stakeholders
- March 1<sup>st</sup> Event
- Based on outcomes of data collection for all evaluation criteria on all promising streets
- Use industry standard traffic modeling software to identify traffic operation impacts of cycling facility on all promising streets

**PHASE 3**

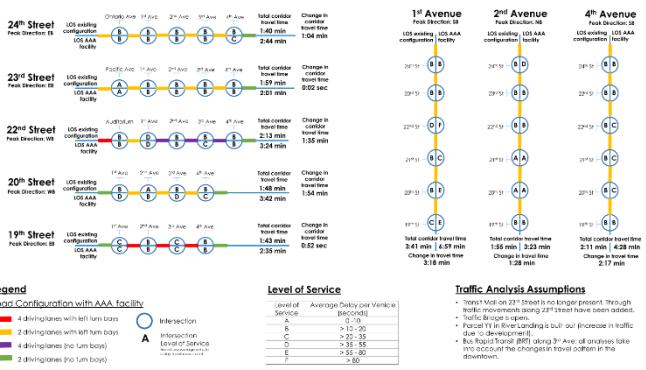
- Design
- Report to City Council
- June 2018
- Determine the appropriate facility type using industry guidelines and practices

## PROPOSED AAA NETWORK: Map of Recommended Streets



TRAFFIC LEVEL OF SERVICE & TRAVEL TIME ANALYSIS [PM PEAK PERIOD]

The City of Saskatoon uses the Highway Capacity Manual (HCM) to determine Level of Service (LOS). LOS is a measure of average delay per motor vehicle at each intersection. The illustrations below show the change in LOS at each intersection and the change in travel time for each corridor when a AAA facility is added to the street.



## **PROPOSED AAA NETWORK**

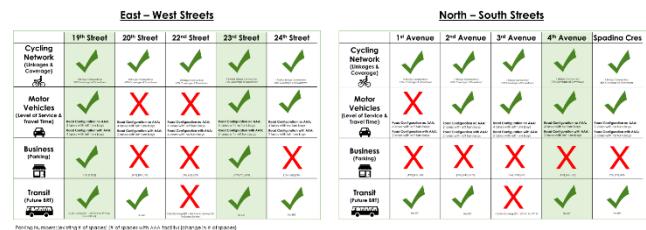
### **Connections To Existing And Proposed AAA Facilities**



PROPOSED AAA NETWORK: Overview of Network Decision Making

Downtown streets support a number of different land uses through a variety of travel modes. When assessing the appropriate streets for a AAA cycling facility, it is important to consider the impacts to all users in the Downtown.

The charts below provide a high-level overview of the detailed analysis for each of the streets considered for a AAA facility.



AAA EVALUATION CRITERIA: COMPARISON OF EAST-WEST STREETS						
						
	19th Street	20th Street	22nd Street	23rd Street	24th Street	25th Street
<b>BICYCLE NETWORK</b>						
Linkages to Surrounding Areas						
Connectivity East	Good. Terminates at 4th Avenue.	Great. Terminates at Spadina Cres.	Ok. Terminates at Spadina Cres, but deflects south at 5th Ave.	Great. Terminates at Spadina Cres.	Great. Terminates at Spadina Cres.	Great. Terminates at Spadina Cres.
Connectivity West	Great. Continues west to Ave M	Great. Continues west to Vancouver Ave	Great. Continues west to City Limits	Ok. Continues west to Vancouver Ave, but deflects at Jamison St	Ok. Terminates at Idylwyld Drive	Ok. Terminates at Idylwyld Drive
Coverage (% of downtown within 400m of Proposed Facility)	35%	50%	65%	70%	60%	40%
Linkages to Existing & Proposed AAA Facilities						
Bridges	Great connection to Traffic Bridge & Broadway Bridge	No bridge connections	No bridge connections	Ok connection to University Bridge	Ok connection to University Bridge	Great connection to University Bridge
Existing AAA Facilities	None	None	None	Connects to Biomarre Bikeway	None	Connects to SW Connector MUP
Proposed AAA Facilities	Connects to proposed cycle track on Idylwyld Drive	Connects to proposed cycle track on Idylwyld Drive	Connects to proposed cycle track on Idylwyld Drive	Connects to proposed multi-use pathway on Idylwyld Drive	Connects to proposed multi-use pathway on Idylwyld Drive	Connects to proposed multi-use pathway on Idylwyld Drive
Current and Potential Bicycle Traffic						
Key Destinations Served	River Landing, Remai Modern, Government Building, Prov. Court, Midtown Plaza	Midtown Plaza, Several retail shops west of Idylwyld Dr	Sturdy Stone, Some office / retail	TCU Place, Francis Morrison Library, City Hall, Medical Offices	Kinsmen Park, City Hall	Kinsmen Park, Police Station
<b>PEOPLE WALKING</b>						
Pedestrian Improvements						
Opportunity for Improvements	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Yes. Increased separation from traffic	Somewhat. Already streetcapped
<b>CYCLIST SAFETY</b>						
Conflict with Vehicles						
Motor Vehicles per Day (Average Annual Daily Traffic)	17,000 - 25,000* *estimated	13,000 - 20,000* *estimated	15,000 - 30,000* *estimated	7,000 - 12,000* *estimated	8,000 - 13,000* *estimated	23,000 - 43,000 2016 COSAADT
<b>PEOPLE DRIVING</b>						
Automobile travel time [PM Peak Period]						
Peak Direction of Travel Time (existing configuration)	Eastbound	Westbound	Westbound	Eastbound	Eastbound	Not completed as this street was removed from consideration for a AAA facility at this time.
Travel Time (AAA facility) Change in Travel Time	2:35 min	3:42 min	3:24 min	2:01 min	2:44 min	1:54 min
0.52 sec	1:35 min	0.02 sec	1:04 min			
<b>TRANSIT</b>						
Transit Stop Conflicts						
Current # of Stops	5	3	4	9	2	9
Future # of Stops	None Identified	Possibility of future stops	2 BRT Stations	None Identified	None Identified	2 BRT Stations
Current Transit Route	Yes	Yes	Yes	Yes	Yes	Yes
Future Transit Route	BRT proposed as curb running from 4th Ave to 3rd Ave	Identified as possible high frequency transit west of 4th Ave	Identified as future curbside running M/F route	None Identified	None Identified	BRT proposed as curb running from Spadina to 3rd Ave
<b>BUSINESS</b>						
Street Environment						
Current # of Spaces	17	118	23 building entrances (1.9 per block face)	Parking	103	124
# of Spaces with AAA Change in # of Spaces	17	80	63	99 (Parking added in front/behind)	56	58
0	-38	-33	-13	-13	50	-6
Average activity: 21 building entrances (1.9 per block face)						
Average activity: 24 building entrances (1.6 per block face)						
* Traffic analysis assumptions: • Transient traffic on 23rd Street is no longer present. Through traffic movements along 23rd Street have been added. • Traffic Bridge is no longer present. • Parc Y in River Landing is built out (increase in traffic due to development). • Bus Rapid Transit (BRT) along 3rd Ave: all analyses take into account the changes in travel pattern in the downtown.						
A Due to removal of parking at intersections and on each side of driveways to improve visibility/lighting.						

AAA EVALUATION CRITERIA: COMPARISON OF NORTH-SOUTH STREETS						
						
	Idylwyld Drive	1st Avenue	2nd Avenue	3rd Avenue	4th Avenue	Spadina Cres
<b>BICYCLE NETWORK</b>						
Linkages to Surrounding Areas						
Connectivity North	Great. Extends beyond 25th St.	Great. Extends beyond 25th St.	Great. Extends beyond 25th St.	Great. Extends beyond 25th St (4th Ave in one way street to E of 25th)	Great. Extends beyond 25th St. Connects with Meewasin trail system.	Great. Extends beyond 25th St. Connects with Meewasin trail system.
Connectivity South	Ok. Terminates at 20th, continues to 19th, then 21st, then 22nd, then 23rd, then 24th, then 25th, then 26th, then 27th, then 28th, then 29th, then 30th, then 31st, then 32nd, then 33rd, then 34th, then 35th, then 36th, then 37th, then 38th, then 39th, then 40th, then 41st, then 42nd, then 43rd, then 44th, then 45th, then 46th, then 47th, then 48th, then 49th, then 50th, then 51st, then 52nd, then 53rd, then 54th, then 55th, then 56th, then 57th, then 58th, then 59th, then 60th, then 61st, then 62nd, then 63rd, then 64th, then 65th, then 66th, then 67th, then 68th, then 69th, then 70th, then 71st, then 72nd, then 73rd, then 74th, then 75th, then 76th, then 77th, then 78th, then 79th, then 80th, then 81st, then 82nd, then 83rd, then 84th, then 85th, then 86th, then 87th, then 88th, then 89th, then 90th, then 91st, then 92nd, then 93rd, then 94th, then 95th, then 96th, then 97th, then 98th, then 99th, then 100th, then 101st, then 102nd, then 103rd, then 104th, then 105th, then 106th, then 107th, then 108th, then 109th, then 110th, then 111th, then 112th, then 113th, then 114th, then 115th, then 116th, then 117th, then 118th, then 119th, then 120th, then 121st, then 122nd, then 123rd, then 124th, then 125th, then 126th, then 127th, then 128th, then 129th, then 130th, then 131st, then 132nd, then 133rd, then 134th, then 135th, then 136th, then 137th, then 138th, then 139th, then 140th, then 141st, then 142nd, then 143rd, then 144th, then 145th, then 146th, then 147th, then 148th, then 149th, then 150th, then 151st, then 152nd, then 153rd, then 154th, then 155th, then 156th, then 157th, then 158th, then 159th, then 160th, then 161st, then 162nd, then 163rd, then 164th, then 165th, then 166th, then 167th, then 168th, then 169th, then 170th, then 171st, then 172nd, then 173rd, then 174th, then 175th, then 176th, then 177th, then 178th, then 179th, then 180th, then 181st, then 182nd, then 183rd, then 184th, then 185th, then 186th, then 187th, then 188th, then 189th, then 190th, then 191st, then 192nd, then 193rd, then 194th, then 195th, then 196th, then 197th, then 198th, then 199th, then 200th, then 201st, then 202nd, then 203rd, then 204th, then 205th, then 206th, then 207th, then 208th, then 209th, then 210th, then 211st, then 212nd, then 213rd, then 214th, then 215th, then 216th, then 217th, then 218th, then 219th, then 220th, then 221st, then 222nd, then 223rd, then 224th, then 225th, then 226th, then 227th, then 228th, then 229th, then 230th, then 231st, then 232nd, then 233rd, then 234th, then 235th, then 236th, then 237th, then 238th, then 239th, then 240th, then 241st, then 242nd, then 243rd, then 244th, then 245th, then 246th, then 247th, then 248th, then 249th, then 250th, then 251st, then 252nd, then 253rd, then 254th, then 255th, then 256th, then 257th, then 258th, then 259th, then 260th, then 261st, then 262nd, then 263rd, then 264th, then 265th, then 266th, then 267th, then 268th, then 269th, then 270th, then 271st, then 272nd, then 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## 1.6 DOWNTOWN AT NETWORK: NOVEMBER 2018 ENGAGEMENT SUMMARY

### 1.6.1 Engagement Objectives

- Provide an overview on the project and technical assessment;
- Share the recommended AT network of Downtown streets and how it connects to the city-wide network;
- Show high-level concept designs to illustrate how the proposed network corridors will look with AT facilities; and
- Obtain feedback on the routes selected, including asking attendees to indicate a preference between a north-south AT route on 3<sup>rd</sup> Avenue or 4<sup>th</sup> Avenue.

### 1.6.2 What We Asked

Nine display boards were set up and manned by project staff. Staff discussed the content of the boards with attendees and answered questions. The boards contained the following information:

- An overview of the project timeline and technical assessment, including the factors that were used to assess the suitability of Downtown streets for hosting AT facilities;
- A map of the proposed Downtown AT network was provided, as well as how this network would connect to existing and future AT facilities beyond the Downtown;
- Conceptual design details were shown for each proposed network street, including the recommended facility type, street operations, and key design features;
- Three types of conceptual intersection designs were shown, highlighting the key features of each design;
- Additional detail was provided on design elements for separation and barrier types, options for accessible parking, and how transit stops would be integrated; and
- A comparison of 3<sup>rd</sup> Avenue and 4<sup>th</sup> Avenue was shown and participants were asked to indicate their preferred north-south AT route.

### 1.6.3 Who Attended

Three separate events were held in November 2018. In total, approximately 365 people attended all three events.

*Table 1: November 2018 Event Summary*

Event	Date	Total Attendance
Downtown Come and Go Community Event	November 6, 2018, 3:00pm – 8:00pm	73
Broadway Come and Go Community Event	November 8, 2018, 3:00pm – 8:00pm	216
Midtown Mall Pop Up	November 16, 10:00am – 2:00pm	76

### 1.6.4 What We Heard

Overall, attendees supported an AT facility on 23<sup>rd</sup> Street and 19<sup>th</sup> Street. When asked, attendees supported an AT facility on 3<sup>rd</sup> Avenue rather than 4<sup>th</sup> Avenue. Of the 100 attendees who chose to indicate their preference, 78 preferred 3<sup>rd</sup> Avenue and 22 preferred 4<sup>th</sup> Avenue.

Comments focused on ensuring safe intersection designs, including a preference toward protected intersections. Attendees also liked the idea of more permanent barrier between the parking lane and the bike lane, and a preference toward a different style of delineator pole. It was noted that the barrier should be installed in such a way as to not create a hazard for people walking, cycling, or parking.

Positive feedback was received for the bidirectional facility along 19<sup>th</sup> Street, with attendees citing the high-visibility (no parking adjacent to the lanes) and the bicycle signals at intersections. The need for an improved connection to the Broadway Bridge from 19<sup>th</sup> Street was raised.

Of those who supported the network, many agreed with the streets selected and supported the evaluation process used to arrive at those streets.

Generally, those who were not supportive of the network were not supportive of any protected cycling facility within the Downtown, citing negative impacts to motorists, parking implications, underutilization of current bike lanes Downtown, and cost implications.

## 1.6.5 Boards

Project Overview		Project Timeline		Assessment Process		Results of Assessment	
<h2>Project Overview</h2> <p>Downtown All Ages and Abilities Cycling Network Study</p>		<h3>Project Timeline</h3> <ul style="list-style-type: none"> <li>Stakeholder Engagement</li> <li>Stakeholder + Public Engagement</li> <li>1st Presentation to Committee</li> <li>2nd Presentation to Committee</li> <li>Stakeholder + Engagement</li> <li>Presentation to City Council</li> </ul>		<h3>Assessment Process</h3> <p>Downtown streets support a number of different land uses through a variety of travel modes.</p> <p>To ensure that the most appropriate streets host AAA facilities, Downtown streets were assessed using several factors:</p> <ul style="list-style-type: none"> <li>Ride Network</li> <li>Cyclist Safety</li> <li>Vehicle Driving</li> <li>Transit</li> <li>Business</li> <li>People Walking</li> </ul>		<h3>Results of Assessment</h3> <p>After reviewing all of the factors and constraints for each street, the following AAA network configuration is proposed:</p> <p><b>North-South Streets:</b></p> <ul style="list-style-type: none"> <li>Hyde Street (consistent with Imagine It! Hyde project), and</li> <li>3rd Avenue OR 4th Avenue, depending on the location of BRT.</li> </ul> <p><b>East-West Streets:</b></p> <ul style="list-style-type: none"> <li>19th Street and</li> <li>23rd Street.</li> </ul> <p>Dimensions AAA Cycling Network Map</p> <p>The assessment did not weigh any category above another. It was used to understand the tradeoffs among all road users that could result from the inclusion of an AAA cycling facility.</p> <p>Detailed results from the analysis are available at <a href="http://saskatoon.ca/cycling">saskatoon.ca/cycling</a></p>	

**Downtown All Ages and Abilities Cycling Network Study**

# Developing a Connected Network

Connections to other AAA facilities are important to support the city wide network. This map shows how the proposed network connects to existing AAA cycling facilities and proposed cycling facilities within and beyond the study area. The map shows a connection is desirable through downtown on either 3rd Avenue or 4th Avenue.

**PROJECTS NEAR/WITHIN STUDY AREA:**

- Completed AAA projects:**
  - Victoria Ave Cycle Track
  - Traffic Bridge Multi-Use Pathways
  - 33rd Street Multi-Use Pathway (Spadina Crescent to 33rd Street) (includes two blocks between 10th and 11th Avenues)
  - 29th Street Bike Boulevard
- Scheduled for completion in 2019-2020**
  - 33rd Street Multi-Use Pathway
  - Westgate Multi-Use Corridor (Avenue D to Avenue W)
  - Intersection improvements to 3rd Avenue/19th Street
- Planning/Functional Design Stages**
  - 19th Street Protected Bike Lane Plan
  - Myrtle Drive Corridor Plan, 20th Street to 25th Street

**LEGEND**

- Proposed AAA Network
- AAA Existing Network
- Protected Bike Lane/On-street Shared Lanes
- Cycle Track
- Bike Boulevard
- Multi-Use Pathways
- Multi-Use Path or Trail
- Local Roads
- Shaded Areas
- Shaded Area and New Lanes
- On-Ramp/Off-Ramp to Road
- Express Street (Streetcar high-speed and High-Speed Rail)
- Park/Plaza/Crosswalk
- Existing Multi-Use Path

**Downtown All Ages and Abilities Cycling Network Study**

## 4<sup>th</sup> Avenue Details

**4<sup>th</sup> Avenue | Overview of Technical Analysis**

**4<sup>th</sup> Avenue | Mid-Block Conceptual Rendering**

**4<sup>th</sup> Avenue | Plan View Conceptual Design - 21<sup>st</sup> Street to 22<sup>nd</sup> Street**

**4<sup>th</sup> Avenue | Typical Cross-Section**

**Unidirectional Design Elements**

- Crosswalks provide a dedicated space at an intersection for cyclists to cross the street, prioritizing their movement over motor vehicles during turning.
- Bike Boxes increase a cyclist's ability to safely and comfortably make right turns by providing a safe zone between cyclists and motor vehicles at signalized intersections.
- Breakaway shifts in the bike lane allow to protect bike lane infrastructure and cyclists can see one another better.
- Buffer Areas create a buffer zone from parked vehicles and moving traffic.
- Two-Way Left Turn Lanes accommodate motor vehicle turning all at once across all intersections.
- Parking is provided along the length of the facility, but pushed back from the curb and protected by bollards or curbside access points.
- Raised Curb Extensions reduce the crossing distance for pedestrians.

**Downtown All Ages and Abilities Cycling Network Study**

## 3rd Avenue Details

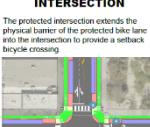
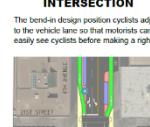
**3rd Avenue | Overview of Technical Analysis**

**3rd Avenue | Mid-Block Conceptual Rendering**

**3rd Avenue | Plan View Conceptual Design: 22nd Street to 23rd Street**

**3rd Avenue | Typical Cross Section**

- Unidirectional Design Principles:**
- **Crosswalks:** Consider adding a dedicated crosswalk at an intersection for cyclists to safely cross the street through an intersection while decreasing conflicts with vehicles.
- **Blue Boxes:** Improve cycling safety by safely and comfortably make left turns by reducing turning conflicts between cyclists and motor vehicles.
- **Bend:** Shift the blue bike lane to the dedicated traffic on one end and cyclists can cross each other better.
- **Buffer Area:** Separate cyclists from parked vehicles as much as possible.
- **Developed Left Turn Bays:** accommodate wider vehicles turning at an intersection. A green box will indicate where the left turn lanes are currently configured.
- **Parking:** Provide a protected length of the blue bike lane, but parked cars must be able to turn around without impacting the blue bike lane.
- **Protected Intersections:** extend the physical width of the protected bike lane into the intersection to provide a certain bicycle crossing.

Intersection Design	
<h3>PROTECTED INTERSECTION</h3>  <p>The protected intersection extends the green box to include the protected bike lane into the intersection to provide a setback bicycle crossing.</p> <ul style="list-style-type: none"> <li>Corner islands reduce turning radius at the corner where they pass by cyclists heading through the intersection.</li> <li>Forward stop bars at a protected place for cyclists to wait when crossing or turning.</li> <li>Pedestrian island reduces the crossing distance for pedestrians.</li> <li>Curb zones supporting the intersection could be used with pedestrian island to provide a safe place for cyclists to wait and cross the street.</li> <li>Right turn on red can be sign removed after that, but right turn on red can still yield.</li> <li>People cycling and driving below the same traffic signal although specific signs can be used to manage right of way.</li> <li>Intersection could include raised and built with textured surfaces and other enhancements.</li> </ul>	<h3>STANDARD INTERSECTION</h3>  <p>The standard design position cyclists adjacent to the vehicle lane so that motorists can easily see cyclists before making a right turn.</p> <ul style="list-style-type: none"> <li>Used as a start: the new green box is increased levels so motorists and cyclists can see each other.</li> <li>Right Cut Extensions creates the crossing distance for pedestrians.</li> <li>Blue Boxes provide a formal避难所 space for cyclists making a right turn on red.</li> <li>Our boxes determine the crossing distance needed with cyclist's elements while maintaining visibility between cyclists and motorists.</li> <li>Right turn on red can be sign removed, drivers that catch the lights can keep the right of way through the intersection even though vehicles had just passed.</li> <li>People cycling and driving below the same traffic signal.</li> <li>Sidewalk widening provides opportunity for landscaping, cover storage, and amenities.</li> </ul>
	<h3>BIDIRECTIONAL INTERSECTION</h3>  <p>Two-way protected bike lanes completely separate movement of cars and bikes at intersections using bi-directional traffic signals for example turning and left-turning cars have a red light, while cyclists going through receive a green light.</p> <ul style="list-style-type: none"> <li>Blue Boxes provide a formal避难所 space for cyclists making a right turn on red.</li> <li>Right Cut Extensions creates the crossing distance for pedestrians.</li> <li>Blue Boxes provide a formal避难所 space for cyclists making a right turn on red.</li> <li>Right turn on red can be sign removed after that, but right turn on red can still yield.</li> <li>Blue Boxes connected to the signal by passive bicycle priority.</li> <li>Signs and traffic signals oriented toward cyclists heading in the direction of travel.</li> <li>Motorists have a clear view of cyclists in the bike lane traveling in both directions.</li> </ul>

Design Elements	
<b>ACCESSIBLE PARKING &amp; TRANSIT STOPS</b>	
There are many considerations that need to be balanced when designing AAA cycling facilities. Below are a few options for design elements for accessible parking spaces and transit stops near protected bike lanes.	
End-Block Parking	 <ul style="list-style-type: none"> <li>Access to sidewalks via the existing curb ramp</li> <li>Walkway/parking buffer to accommodate soil-loading requirements for planters</li> <li>Signs and pavement markings to advise cyclists to yield to pedestrians</li> <li>No parking or other obstructions are placed in the accessible parking space buffer</li> </ul>
Mid-Block Parking	 <ul style="list-style-type: none"> <li>An accessible aisle at street level connects to a pedestrian access ramp and Mid-Block curb ramp</li> <li>Walkway/parking buffer to accommodate soil-loading requirements for planters</li> <li>The parking area is located near the end of the parking zone to facilitate ease of access</li> <li>A crosswalk and curb ramp connect the accessible aisle to the sidewalk</li> <li>Signs and pavement markings to advise cyclists to yield to pedestrians</li> <li>No parking or other obstructions are placed in the accessible parking space buffer</li> </ul>
Adjacent Block Parking	 <ul style="list-style-type: none"> <li>Diagonally on the parking spot on the side street instead of the intersection as an accessible parking space</li> <li>Designing this space would not require a permit to park on the side street, but the permit with the designation accessible parking space would not have an off-street fee.</li> </ul>
Transit Stop	 <ul style="list-style-type: none"> <li>Separate curbs and lanes to improve cyclist comfort and low-speed traffic safety</li> <li>Provide a clear view of the bus, more accessible passenger boarding and alighting</li> <li>Signs and pavement markings to advise cyclists to yield to pedestrians</li> <li>Raised crossing to slow cyclists who must yield to vehicles</li> </ul>
<b>TYPES OF SEPARATION</b>	
There are several types of separation that can be used in the buffer area between the bike lane and the parking lane or motor vehicle travel lane. Below are a few options for separation types that can be used downtown.	
Flexible Delineator Posts	 <ul style="list-style-type: none"> <li>Provides guidance for drivers at eye-level</li> <li>Offer visibility of placement</li> <li>Easily removable</li> <li>Less damage to vehicles in case of large overhang (allowing trucks etc.)</li> </ul>
Bollards	 <ul style="list-style-type: none"> <li>Right turner</li> <li>Suitable for slow streets or adjacent to parking</li> </ul>
Linear Curb	 <ul style="list-style-type: none"> <li>Continuous vertical curb</li> <li>Adds parking guidance</li> </ul>
Raised Median	 <ul style="list-style-type: none"> <li>Wider linear curbs</li> <li>Adds the ability to widen ramps in the buffer (width range 4m to 7.5m)</li> </ul>
Planters	 <ul style="list-style-type: none"> <li>Artistic element to the landscape</li> <li>Can control access to parking if required</li> </ul>

<p>Downtown All Ages and Abilities Cycling Network Study</p> <h2>3rd Avenue or 4th Avenue Comparison</h2> <p>The recommended Downtown AAA cycling network includes 18th Street, 25th Street, and either 3rd Avenue OR 4th Avenue. The Imagine 10wyd project also recommends 10wyd Drive; include AAA cycling facilities through downtown.</p> <p><b>The assessment process determined that either 3rd Avenue or 4th Avenue can accommodate the addition of an AAA cycling facility. The location of the facility is dependent on the final route selection for Bus Rapid Transit, as there is insufficient roadway to accommodate both BRT and AAA facilities on the same street.</b></p> <p>If BRT is located on 1st Avenue, the recommended AAA cycling route is 3rd Avenue. Should BRT be located on 3rd Avenue, the recommended AAA cycling route is 4th Avenue.</p> <p>Below is a comparison of the analysis for both streets. Indicate your preference for 3rd Avenue or 4th Avenue by placing a dot in the appropriate box.</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>AAA NETWORK WITH 3rd AVENUE</b></p> </div> <div style="text-align: center;"> <p><b>AAA NETWORK WITH 4th AVENUE</b></p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><b>Level of Service</b></p> <table border="1"> <thead> <tr> <th>AAA Network</th> <th>AAA Network with 3rd Avenue</th> <th>AAA Network with 4th Avenue</th> </tr> </thead> <tbody> <tr> <td>AAA</td> <td>AAA</td> <td>AAA</td> </tr> <tr> <td>BRT</td> <td>AAA</td> <td>AAA</td> </tr> <tr> <td>10wyd Drive</td> <td>AAA</td> <td>AAA</td> </tr> </tbody> </table> <p>Traffic Analysis Information:</p> <ul style="list-style-type: none"> <li>AAA: 20% Cheaper to build project, through traffic movements along 3rd Street have increased.</li> <li>Traffic Impact: 3 am</li> <li>Peak Hour: 4 pm</li> <li>Impact on 1st Avenue: BRT will increase traffic due to development.</li> <li>Impact on 3rd Avenue: AAA will increase traffic due to development.</li> <li>Impact on 4th Avenue: AAA will increase traffic due to development.</li> <li>Impact on 10wyd Drive: AAA will increase traffic due to development.</li> <li>Impact on 2nd Avenue: AAA will increase traffic due to development.</li> <li>Impact on 5th Avenue: AAA will increase traffic due to development.</li> </ul> </div> <div style="width: 45%;"> <p><b>Level of Service</b></p> <table border="1"> <thead> <tr> <th>AAA Network</th> <th>AAA Network with 3rd Avenue</th> <th>AAA Network with 4th Avenue</th> </tr> </thead> <tbody> <tr> <td>AAA</td> <td>AAA</td> <td>AAA</td> </tr> <tr> <td>BRT</td> <td>AAA</td> <td>AAA</td> </tr> <tr> <td>10wyd Drive</td> <td>AAA</td> <td>AAA</td> </tr> </tbody> </table> <p>Traffic Analysis Information:</p> <ul style="list-style-type: none"> <li>AAA: 20% Cheaper to build project, through traffic movements along 3rd Street have increased.</li> <li>Traffic Impact: 3 am</li> <li>Peak Hour: 4 pm</li> <li>Impact on 1st Avenue: BRT will increase traffic due to development.</li> <li>Impact on 3rd Avenue: AAA will increase traffic due to development.</li> <li>Impact on 4th Avenue: AAA will increase traffic due to development.</li> <li>Impact on 10wyd Drive: AAA will increase traffic due to development.</li> <li>Impact on 2nd Avenue: AAA will increase traffic due to development.</li> <li>Impact on 5th Avenue: AAA will increase traffic due to development.</li> </ul> </div> </div>	AAA Network	AAA Network with 3rd Avenue	AAA Network with 4th Avenue	AAA	AAA	AAA	BRT	AAA	AAA	10wyd Drive	AAA	AAA	AAA Network	AAA Network with 3rd Avenue	AAA Network with 4th Avenue	AAA	AAA	AAA	BRT	AAA	AAA	10wyd Drive	AAA	AAA	<p><b>Which route do you prefer? Tell us below!</b></p> <p>Want to tell us more? Please fill in a comment form or email <a href="mailto:cycling@seattle.gov">cycling@seattle.gov</a></p>
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BRT	AAA	AAA																							
10wyd Drive	AAA	AAA																							

## 1.7 SASKATOON ACCESSIBILITY ADVISORY COMMITTEE – JANUARY 11<sup>TH</sup>, 2019

### 1.7.1 Engagement Objectives

Deliver a presentation on the proposed accessible parking options and barrier types, and answer any questions the Committee may have.

### 1.7.2 What We Asked

An overview of the Downtown AT Network Study was provided to the committee, as well as the preliminary designs for accessible parking/loading spaces adjacent on Downtown AT corridors. The materials were provided as part of the agenda package for the meeting. The presentation included the following information:

- An overview of City Council direction;
- An overview of the city-wide network;
- An overview of the preliminary concept design for the Downtown streets (3<sup>rd</sup> Avenue was the example utilized);
- Preliminary concept designs of two accessible parking/loading options:
  - End Block
  - Mid-Block; and,
- Examples of possible barrier types.

### 1.7.3 Who Attended

Members of the 2019 Saskatoon Accessibility Advisory Committee. A list of the 2019 Committee Members can be found here: <https://www.saskatoon.ca/city-hall/city-council-boards-committees/boards-committees>

### 1.7.4 What We Heard

Overall, the Committee was supportive of the combined approach to accessible parking/loading zones. The Committee would like to see adequate, visible signs indicating the spaces as well as an opportunity to provide input once the final locations and detailed designs are completed for these spaces.

### 1.7.5 Presentation Materials

#### COUNCIL GUIDANCE

The slide displays several City of Saskatoon planning documents and a bar chart. The documents include:

- Strategic Plan 2013-2023
- COMPLETE STREETS DESIGN AND POLICY GUIDE
- GROWTH PLAN SUMMARY REPORT
- ACTIVE TRANSPORTATION PLAN FINAL REPORT

Targets for Commute Trips

Year	Target	Actual	Notes
2013 (ESTIMATED)	87.5% (driven)	87.5%	
2045 (TARGET)	75% (driven)	75%	
	5% (public)	5%	
	10% (cycling)	4%	
	2% (walking)	11%	

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#### Developing a Connected Network

PROJECTS NEAR/WITHIN STUDY AREA:

- Completed AAA projects:
  - Victoria Ave Cycle Track
  - Traffic Bridge Multi-Use Pathways
  - 33<sup>rd</sup> Street Multi-Use Pathway (Spadina Crescent to 3<sup>rd</sup> Avenue, and a couple blocks between Idylwyld Drive and 3<sup>rd</sup> Avenue)
  - 23<sup>rd</sup> Street Bike Boulevard
- Scheduled for completion in 2019/2020:
  - 33<sup>rd</sup> Street Multi-Use Pathway
  - West-Central Multi-Use Corridor (Avenue D to Avenue W)
  - Intersection improvements to 3<sup>rd</sup> Avenue/19<sup>th</sup> Street
- Planning/Functional Design Stages:
  - Idylwyld Drive Corridor Plan, 20<sup>th</sup> Street to 25<sup>th</sup> Street

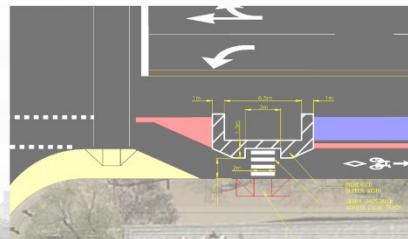
City of Saskatoon logo

## Preliminary Conceptual Design – 3<sup>rd</sup> Avenue



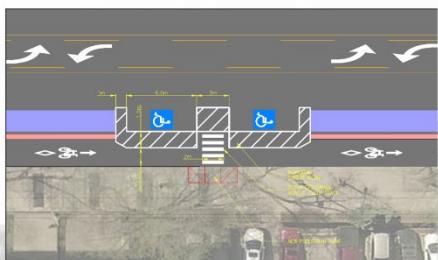
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## Accessible Loading Zone – End Block



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## Accessible Loading Zone – Mid Block



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## Possible Barrier Types

### Flexible Delineator Posts



- Provides guidance for drivers at eye-level
- Offers flexibility of placement
- Easily replaceable
- Less damage to vehicles with large overhangs (delivery trucks etc.)

### Bollards



- Rigid barrier
- Suitable for slow streets or adjacent to parking

### Linear Curb



- Continuous vertical curb
- Adds parking guidance

### Raised Median



- Wider than linear curbs
- Adds the ability to install signs in the buffer (widths range from 0.5m to 1.5m)

### Planters



- Aesthetic treatment to streetscape
- Cannot be continuous if access to parking is required

City of Saskatoon

## Timeline



City of Saskatoon



# Downtown All Ages and Abilities (AAA) Cycling Network Stakeholder Session

Prepared for:  
City of Saskatoon  
222 3rd Ave North  
Saskatoon, SK S7K 0J5

Submitted by:  
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117 - 3rd Avenue South  
Saskatoon, SK S7K 1L6

# **Stakeholder Session**



# Downtown All Ages and Abilities (AAA) Cycling Network – Stakeholder Session

## Background

The City of Saskatoon's Complete Streets Design and Policy Guide is designed to achieve a more balanced approach to street design, one that accommodates the safe movement of people all ages and abilities by multiple modes (i.e. walking, cycling, transit, vehicle). The City's Active Transportation Plan identifies the importance of providing an interconnected system of bicycle facilities that is comfortable and attractive for users of all ages and abilities.

When the Downtown Protected Bike Lane Demonstration (4th Avenue and 23rd Street) wrapped up in November 2017, City Council directed the City administration to report back on what a complete, connected downtown AAA cycling network would look like in Saskatoon.

The City mailed letters to approximately 1,170 downtown property owners, businesses and other stakeholders (e.g. the cycling community) on January 8th, 2018. The letter described aspects of the AAA initiative, including that it will:

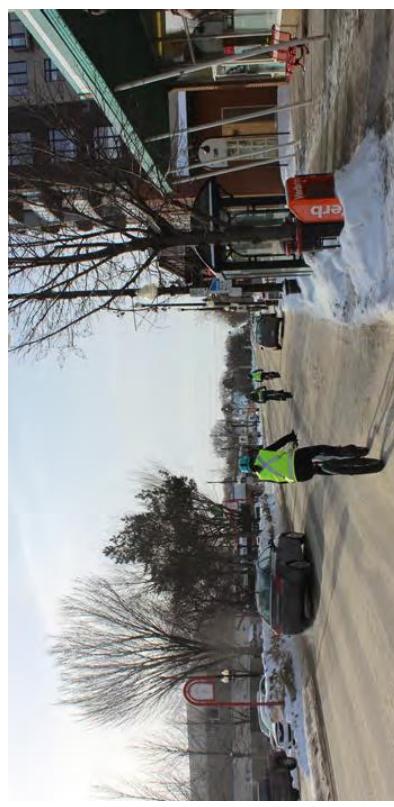
- Take into consideration how cycling facilities connect to Saskatoon's wider cycling network.
- Determine how to integrate with other key downtown projects, such as the Bus Rapid Transit (BRT) plan along 3rd Avenue and opening of the Traffic Bridge in fall 2018.

- Consider the impacts on all downtown users to ensure that the most appropriate streets host AAA facilities.

A follow-up email was sent on January 15, 2018. Recipients of the letter and email were asked to add their names to a contact list for future project updates. Stakeholders who opted in for updates, as well as several targeted stakeholders such as organizations representing cyclists, pedestrians, older adults, and many more, were invited to attend the open house sessions on January 20, 2018. The sessions were an opportunity for stakeholders to share their knowledge and insights regarding the development of the Downtown All Ages and Abilities (AAA) Cycling Network.

## Session Format

There were two stakeholder events, each approximately 90 minutes in length. Each session began with a brief PowerPoint presentation that included an explanation of the Active Transportation Plan and how it integrates with the Complete Streets Design and Policy Guide, the Growth Plan and the City's Streets



*Photo source: City of Saskatoon Active Transportation Plan*

Strategic Plan, as well as noting other influencing factors and projects (e.g. BRT, Imagine Idylwyld, Traffic Bridge, 3rd Avenue and 19th Street intersection upgrades).

The presentation referenced the timeline for the Downtown Protected Bike Lane Demonstration Project (2015 – 2017), the provision that protected bike lanes (PBLs) be included in the Downtown AAA Cycling Network, and that the current PBLs on 4th Avenue and 23rd Street be retained until the Downtown network is presented to City Council.

The presentation defined the downtown study area and highlighted the three guiding principles of the AAA cycling network:

- **Safety** – Cyclists are vulnerable and travel more slowly than motor vehicles.
- **Comfort** – This is an important part of attracting more people to bicycling as a mode of travel.
- **Connectivity** – Cyclists need a network of continuous low-stress routes that provide connections to local and city-wide destinations.

The presentation was followed by discussion and engagement activities between stakeholders and the Active Transportation Program Manager, with four City Transportation Engineers stationed at informational display boards (see Appendix).

Stakeholders were asked to provide input regarding criteria that could be used to assess which downtown streets are best suited for a AAA cycling facility, as well as challenges and opportunities for each street.

## Who Attended

The sessions were attended by between 40 and 50 people in total (not everyone signed in). Stakeholders in attendance included individuals who signed on behalf of the Saskatchewan Health Authority, as well as civic facilities such as TCU Place, Saskatoon Fire Department and Saskatoon Public Library. Stakeholders from the Saskatoon Chamber of Commerce, Downtown Business Improvement District, Meewasin Valley Authority, Open Door Society and Partners in Employment also attended. Downtown business people attended, although they appeared to be limited in number. There were also stakeholders from Saskatoon Cycles as well as university students. The City Councillor representing the downtown Saskatoon ward was also in attendance.

## Evaluation Criteria

What's more important to stakeholders in terms of where AAA cycling facilities should go? Stakeholders were asked to prioritize the criteria being used by the City in their evaluation of streets on which to locate AAA cycling facilities. Stakeholders did this by allocating dots to the criteria (posted on display boards) they felt should receive priority. Each stakeholder was given six dots, which they could allocate in any manner they chose for the six criteria. This "dotmocracy" is a cumulative voting method used to identify preferences regarding specific criteria.

## SUMMARY OF STAKEHOLDER INPUT

The following is a summary of stakeholder input regarding the evaluation criteria. Of the six criteria presented, stakeholders allocated the majority (59%) of dots to two criteria—bicycle network (34% of dots) and cyclist safety (25% of dots).

## EVALUATION CRITERIA (DOTMOCRACY)

<b>Bicycle Network (34%)</b>				
Linkages to surrounding areas	17%			
Linkages with other bicycle facilities	13%			
Current and potential bicycle traffic	4%			
<b>Cyclist Safety (25%)</b>				
Merit of segregation	18%			
Conflict with vehicles	7%			
<b>People Walking (14%)</b>				
Pedestrian improvements	10%			
Accessibility	4%			
<b>Business (14%)</b>				
Street environment	11%			
Parking	3%			
<b>People Driving (8%)</b>				
Automobile travel time	8%			
<b>Transit (5%)</b>				
Transit operations	3%			
Transit stop conflicts	2%			
	<b>100%</b>			

## CYCLIST SAFETY

This is followed by cyclist safety (25%), with most prioritizing segregation of cyclists from higher overall traffic volumes and the idea that separation on such corridors will provide the greatest benefit to cyclists. Fewer stakeholders (7%) prioritize corridors with fewer turning movements at intersections and driveways.

## PEDESTRIANS (PEOPLE WALKING)

Stakeholders allocate priority to evaluation criteria around pedestrian safety or impact on pedestrians with mobility needs (10%). These considerations also come up in discussions.

## STREET ENVIRONMENT (BUSINESS)

Some priority (11%) is placed on with additional buffering to improve the pedestrian environment and street level commerce.

## PARKING

Stakeholders are less likely to allocate priority to evaluation criteria that involves impact on parking (3%). As a general rule, it appears that most stakeholders agree that AAA facilities cannot exist on streets with angle parking.

## IMPACT ON MOTORISTS

Some priority (8%) is placed on criteria that consider corridors with the least impact on travel time of people driving.

## TRANSIT

Stakeholders gave priority to bicycle network linkages (30%), including corridors providing linkages to surrounding areas and with bicycle facilities in other parts of Saskatoon. Few stakeholders (4%) prioritize corridors in which large numbers of existing or potential bicycle trips originate and terminate.

## LINKAGES (BICYCLE NETWORK)

Little priority is allocated by stakeholders for evaluation criteria to consider corridors in terms of their potential to conflict with transit (2%) or the idea that corridors with the least impact on transit travel time should be preferred (3%).

# Opportunities and challenges



## Participant Suggestions on Maps

- The presentation featured two stations with large maps showing both existing and potential AAA routes. During discussion of opportunities and challenges, participants were asked to write their comments on sticky notes and attach to the maps. Those comments are summarized below. They have been organized into several categories, including bridge access, parking, traffic lights, preferred routes and excluded routes.

- SW side of the bridge. Cyclists travelling down the north (right) side of the bridge should be able to access 19<sup>th</sup> Street.
- Better signage on all bridges depicting expectations for pedestrians, cyclists and cars would be helpful.
- Dangerous for pedestrians and cyclists where Broadway Bridge accesses 4<sup>th</sup> Avenue; this multi-use trail has poor visibility (curved) where it becomes 4<sup>th</sup> Avenue and is too narrow for shared use by pedestrians and cyclists.

## Broadway Bridge, Traffic Bridge and Access to AAA Network

- Connectivity via AAA network to Riversdale area on 19<sup>th</sup> Street. Close outside lanes, make bike path Avenues A to H.
- New Traffic Bridge is going to be nicest bridge for cyclist crossings; connecting it with north/south AAA routes in an appealing way is key.
- Connectivity via the University Bridge between Saskatoon City Hospital and Royal University Hospital and the University of Saskatchewan is important and needed by a large number of year-round cyclists.
- Need improved connections for cyclists and pedestrians coming off bridges.
- The bike lane should be on 3<sup>rd</sup> Avenue off the Traffic Bridge.
- When Traffic Bridge opens, need excellent way findings to access Farmers' Market via River Landing.
- Route across Broadway Bridge to get to Farmers' Market is challenging if you cross on the south side of the bridge and proceed west; cyclists have to stay on sidewalks.
- The bottom of the Broadway Bridge needs work. Cyclists travelling south on 4<sup>th</sup> Avenue should be able to get to the

## Parking

- There are issues for the PBL on 4<sup>th</sup> Avenue with the parkade between 21<sup>st</sup> and 22<sup>nd</sup> Street. Parkade users need to be informed of the bike lane and potential hazards to cyclists from cars exiting the parkade, particularly during rush hour.
- The parkade on 4<sup>th</sup> Avenue between 21<sup>st</sup> and 22<sup>nd</sup> Streets will be a bottleneck whether there is a PBL there or not. Don't let bad design of parkade bring down an ideal bike lane street.
- Better demarcation of parking stalls would assist with motorists and where they can park.
- City vehicles, taxis, delivery trucks and dumpsters are often parked on the PBL on 4<sup>th</sup> Avenue, right after 21<sup>st</sup> Street.

## Traffic Lights

- Dedicated lane plus lights would work better for cyclists.
- Would like to see traffic light changes; bike specific lights with different timing for bikes using AAA routes and green lights for right turns for motorists.
- Work needs to be done on traffic lights on existing PBL – need advanced start for cyclists to enable them to enter intersections before motorists and no right turn on red light

for motorists. If right turn is needed for traffic flow, include a green arrow in light sequence.

## Preferred Routes

- The natural and best east-west corridor for a bike path is Meewasin Trail along Spadina Crescent. It connects to 4 bridges downtown. Could put separate lane for bikes adjacent to pedestrian path on Meewasin Trail.
- 3<sup>rd</sup> Avenue is the most logical way to travel north-south across downtown by transit and bicycle. Good connectivity, including to north residential areas. Prioritize bus and bikes before cars on this route.
- BRT could go north on 4<sup>th</sup> Avenue and south on 3<sup>rd</sup> Avenue; would provide room for a two-way cycle path on 3<sup>rd</sup> Avenue.
- 4<sup>th</sup> Avenue PBL is a great place to bike.
- I'd like to see a second north-south PBL on 1<sup>st</sup> Avenue from 19<sup>th</sup> Street to Queen Street.
- 21<sup>st</sup> Street presents a great opportunity to improve bike safety; a route here would encourage cycling downtown and provide an opportunity for businesses, cyclists and pedestrians to work together. Great route if used properly.
- 23<sup>rd</sup> Street is a good street for cycling; work on modifying the Bus Mall to better accommodate cyclists.
- For east-west network segments, 25th, 23rd and 19th Street would work well for providing east-west coverage, both for destination stops and commuting through.
- 2nd Avenue does not work due to angle parking, so 3<sup>rd</sup> and 4<sup>th</sup> Avenues are best options; 1<sup>st</sup> Avenue is also very wide.
- Remove 2<sup>nd</sup> Avenue from consideration for AAA; angled parking and street design create too many restrictions. 21<sup>st</sup>

Street has same challenges, should also be removed from consideration.

- 2<sup>nd</sup> Avenue would be good option if angle parking eliminated.
- Transit Mall in the way of PBL on 23<sup>rd</sup> Street is disruptive.
- PBL should be on 25<sup>th</sup> Street; provides access from University Bridge, University of Saskatchewan and College Drive. Street is so busy that cyclists use sidewalk.
- Consider moving to one-way streets downtown to open up more options for dedicated bike corridors.
- Split up network in logical east-west, north-south sections equal distances apart: Meewasin Trail, Idylwyld Drive, 23<sup>rd</sup> Street and Queen Street.
- Response from fireman: No; current street width in front of #1 Fire Station is required to allow truck to back in.

## Routes Excluded from Consideration

Several comments were collected at the station identifying downtown streets excluded from consideration (see appendix).

- Four of five notes agree with exclusion of all streets listed, including 5th Avenue between 22nd and 25th Street, 6th Avenue between 24th and 25th Street, 21st Street E., and Ontario Avenue, Wall Street and Pacific Avenue.
- There is particular agreement on the exclusion of 21st Street, as this is a great opportunity for a pedestrian priority street.
- One comment disagrees with excluding 5th Ave between 22nd and 25th Street, because it would provide a good connection between Kinsmen Park and north residential area and possibly to 4<sup>th</sup> Avenue and the PBL.

## Other

- Broken posts separating PBL from road lead cars to park in the bike lane.
- Several PBL posts are down along 23<sup>rd</sup> Street, sometimes lying across the bike lane. What is maintenance schedule?
- Will maintenance be improved when AAA is built?
- Short-height jersey barriers would help protect cyclists (sticky note re: Spadina Crescent in front of Bessborough Hotel).
- the bike lane.
- If 19<sup>th</sup> Street is being considered for cycling facility west of downtown, changes have to be made to 19<sup>th</sup> in downtown as it's not bike friendly; most cyclists currently use the sidewalk.
- Appreciate the tweaking the City has done, but more needs to be done. At intersections, vehicles need to be stopped further back so they can see the cyclist waiting at the intersection to go forward.
- Separate cyclists and pedestrians at lights.
- If I'm waiting at a red light when cycling, if I'm not on a street that has a PBL, I'm not sure where I should be – in the traffic lane or in the furthest right lane. If I'm in the furthest right lane, I impede motorists trying to turn right.
- Improved snow clearing on bike lanes is important.
- Improved communication to the public about real cost (time and money) of PBLs.
- Would like to see PBLs, but only in summer and by using removable posts and temporary lane markings.
- The sharrows bike lane at the corner of Spadina Crescent and 24<sup>th</sup> Street narrows too much; needs to be widened for safety of cyclists.
- Crossing Wall Street at 24<sup>th</sup> Street is a challenge for pedestrians – lots of near misses for our staff. A challenge also for cyclists, but less so than for pedestrians.
- Future connection to the rail corridor and North Downtown should be considered.
- The alley north of 5<sup>th</sup> Avenue (adjacent to the YWCA) should be bought by the City and used as a bike lane.
- Businesses along 4<sup>th</sup> Avenue are clearing snow into PBLs.
- Buses along 23<sup>rd</sup> Street currently stop in PBL. Consider raising cycle lane and having bus stop in driving lane.



*Photo source: City of Saskatoon Active Transportation Plan*

# Overview of Discussion at Stations

In addition to capturing comments stakeholders attached to the maps, notes were made of stakeholder discussions at the two stations. The following is a summary of those discussions.

## Safety

Safety is one of the most overheard words in discussions at the sessions, and the most important consideration as it provides context for many of the comments at the stations. Stakeholders primarily talk about safety in terms of cyclists, but often for pedestrians and even motorists as well. Some primary safety concerns include difficulty parking, getting in and out of parking facilities or turning right without endangering cyclists using corridors with PBLs.

There are suggestions that motorists experience limited

sightlines and that cyclists run the risk of proceeding with an unwarranted sense of security because they are in a PBL, so they proceed with less caution and awareness of pedestrians and motorists that can intrude into their corridor.

Participants also suggest that safety improvements should not only benefit cyclists but also pedestrians and motorists.

## Education

Discussions around safety frequently include comments regarding the importance of education—teaching people how the PBLs work. As one participant notes, “We’re learning now how to

have dedicated bike lanes, so that in the future when it becomes really important for our city to have them, we’ll all know how they work and how to use them, as cyclists, pedestrians and motorists.” The concern is that all people visiting downtown learn how to use AAA facilities responsibly and safely, regardless of whether they are cyclists using AAA facilities or motorists or pedestrians co-existing with them.

Consistency is part of some discussions about the importance of education; some stakeholders suggest that people find the various types of bike lanes (PBLs, sharrows, etc.) confusing.

## PBLs and BRT

Some stakeholders wonder why BRT, currently recommended for 3rd Avenue in the downtown area, and PBLs cannot co-exist on the same street. Some stakeholders do not want to lose the parking along 3rd Avenue that this might entail.

## Demonstration Project

Some stakeholders wonder whether or not the criteria for measuring the 4th Avenue and 23rd Street Demonstration Project has been met. If it has (as is the understanding of some participants), the success of the project is not being celebrated.

Some have the impression that various elements of the demonstration are being cast in a negative light and used to show that it has not been successful.

One suggestion is that communication about AAA facilities should highlight the fact that everyone benefits, not just cyclists.

There is a sense that this is not communicated clearly enough. The PBL demonstration project seemed to place too much focus on comments about the infrastructure benefitting a select group

of people and so was not worth of support. Incorporating messaging that AAA facilities such as PBLs are designed to encourage more people to use cycling as an alternative mode of transportation could counterbalance that argument.

## Corridor Opportunities

Stakeholders find it easier to point out the challenges as opposed to the opportunities with existing and potential AAA streets. Spadina Crescent is a 'natural' corridor, or 'intuitively' where some stakeholders want to go. 23rd Street is often mentioned as a good corridor, despite challenges with the bus mall interrupting the PBL.

There are mentions of whether Idylwyld, after it is redesigned as part of the Imagine Idylwyld plan, has been considered for PBLs. 1st Avenue or 2nd Avenue are mentioned as possible corridors. Some stakeholders suggest that 21st Street between the Bessborough Hotel on Spadina Crescent and Midtown Plaza on 1st Avenue would be a good corridor; however, most suggest this is more appropriate for pedestrian traffic. Overall, there did not appear to be consensus among stakeholders regarding preference for any specific corridors.

## Connectivity is a Challenge

Connecting a potential downtown AAA corridor to other parts of Saskatoon via any of the bridges—Broadway, Traffic, Idylwyld or University—is seen as a major challenge for the network.

## Destination

Some people say it's important to know where cyclists are going in terms of destinations in order to design good bike routes, but others respond that cyclists are just like everyone else in that they are going to all sorts of places. They are not necessarily "just going to the library," for example. Some are going through downtown; some are going to destinations downtown.

## Downtown Business

DTN YXE (Downtown Business Improvement District) has five principles it wanted to reinforce at the session in terms of the downtown AAA network, including:

- Urban Connectivity – Bike lanes are an opportunity to build links between urban districts.
- Suburban Connectivity – It's important to connect Downtown to the suburbs.
- Car Convenience – Motor vehicles remain an important mode of transportation for downtown, and cycling networks should minimize negative affect on parking and congestion.
- Safety – Network design must create safe environments for cyclists and non-cyclists.

## Corridor Challenges

Some of the challenges discussed by stakeholders with the 4th Avenue corridor revolve around too much traffic, restricted sightlines for motorists turning right (and fear of collisions with cyclists they cannot see when doing so), problems with entering and exiting parking facilities because of having to cross the PBL and risks of crossing into motorist lanes for cyclists that want to turn left at intersections along the corridor.

- Destination-driven – The network should take cyclists past major destination businesses downtown to encourage people to stop and enjoy the area.

Some downtown business people suggest that residents from outside of Saskatoon use vehicles to visit the city and will not be likely candidates for cycling. One businessperson says no one comes to their store on a bicycle.

Others point to significant vehicle traffic from people travelling from rural Saskatchewan to medical areas downtown (i.e. Medical Arts building on Spadina Crescent, medical offices on Wall Street).

## Survey Form Comments

The following are verbatim comments recorded on survey forms completed by stakeholders.

### WHAT WENT WELL? WHAT DID YOU APPRECIATE?

- I think the set-up works well; allows for general information and then discussion.
- Nice to have the context set at the beginning.
- The interactive respect of the process.
- Very easy to provide comments and engineers are available for discussion.
- Our group was small so it was easy to provide input and ask questions and discuss with City employees.
- I liked the dots to show which was most important.
- Being part of the process; firsthand knowledge helping shape our city.
- Great to talk directly to engineers, see progress being made.
- Good visuals – maps and boards, people to answer questions.
- The opportunity to give feedback.
- Being able to put formation directly on to the maps.
- The presentation was professional, clear and short.
- Attentive City staff, appeared to genuinely receive and consider comments; provided appropriate feedback/clarification when warranted. Less presentation, more conversation makes sense.

### WHAT DIDN'T WORK?

There are also changes on the horizon from the City Centre, North Downtown and Imagine Idylwyld plans, which should be considered in developing the network. More traffic will also be coming from the City fulfilling its density strategy in core areas around Broadway and the riverbank. Connectivity from the bridges will become an even more important consideration with these developments and plans.

- The maps were vague as to what I should provide on them.
- The evaluation criteria seemed a little repetitive.

- Education should be well understood: cost of maintenance of roads due to cars, low cost of bike lane infrastructure vs. car infrastructure, explain general economic benefits.
- I'm still leery that 'complainers' voice is the one that's focused on; I hope that isn't the case moving forward with decision.
- The questions or input seemed a bit narrow; meaning, there didn't seem to be an option to express that bike lanes should not be pursued.
- Early in process, so still very open-ended; when options are narrowed down, would hope that user groups are more directly engaged as it didn't appear they had been to this point (cyclists in particular) based on responses from City staff.

#### I UNDERSTAND HOW MY INPUT WILL BE USED ... HOW CAN WE IMPROVE IN THIS AREA?

- Process from this point forward could have been more clearly explained.

#### WHAT ELSE WOULD YOU LIKE US TO KNOW?

- I heard one person complain that nobody used bicycles before lanes were implemented, but I personally would not bike without them because I felt unsafe. But with protected lanes would be 100% more likely to bike downtown.
- Poor bike parking facilities at the venue – one hidden bike rack that is too wide for a u-lock.
- I am generally very supportive of what you are doing. Be courageous, you are doing the right thing.
- Keep in mind that if AAA facility is not 100% safe, it is not a failure. It's not realistic to remove all/any risk – but improve, make it as safe as physically possible. In communication efforts, it's safer than current options (e.g. painted bike lanes, sparrow, nothing). With current PBL, because there are still safety/sightline issues at driveways, etc., there was dissenting voice that they were unsafe, needed to go. But they are markedly safer than the previous 4<sup>th</sup> Avenue painted bike lane. You are challenging the status quo and there is bound to be pushback in the community. Courage and political leadership is key to stay the course. Thanks for all your efforts at changing both our physical environment for the better as well as the social normative environment.
- The integration of plans (cycling / transit / pedestrian) is an important aspect of this process.
- It was great to hear from others with their concerns.

#### I UNDERSTOOD WHAT WAS EXPECTED OF ME AS A PARTICIPANT ... HOW CAN WE IMPROVE IN THIS AREA?

- I would have liked to know ahead of time that we would be looking at maps to find/comment on problematic areas. I would have liked to have time before the day to look at the maps on my own and organize my thoughts ahead of time. I apologize if there was an email ahead of time that mentioned this and I missed it.

#### I FEEL MY INPUT WAS ADEQUATELY CAPTURED AND RECORDED ... HOW CAN WE IMPROVE IN THIS AREA?

- Note-taking by staff was evident. Not sure if "sticky note" concept really works, as people are engaged in conversations, which is what should be expected. Notes taken by City staff listening in are probably more valuable.

- I do not believe bike lanes are necessary in this city due to the time we spend in freezing weather and the imposition it puts on vehicle traffic. Just building bike lanes in my opinion will not mean that more people will cycle to work. I do not feel that streetscaping that involves reducing the number or size of traffic lanes improves the downtown area; it may keep people from travelling downtown.
- This event was well thought out and clearly presented, I appreciated being invited.
- Very important to consider keeping the primary designated street for each "mode" separate; biggest concern of those attending was safety, and this would lead to the least likelihood of conflict.



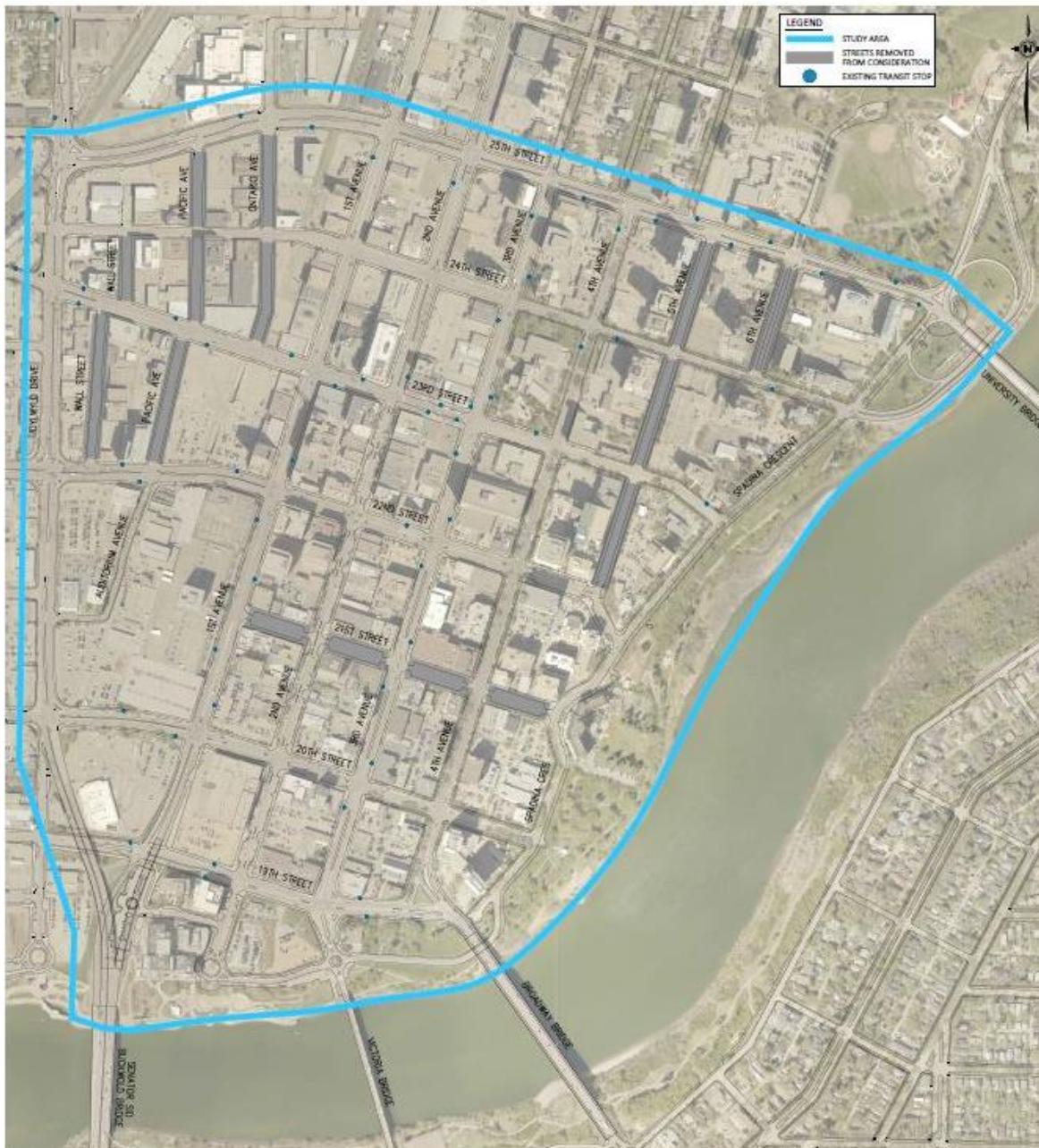
# Appendix



*Photo source: City of Saskatoon Active Transportation Plan*

## Session Display Boards

As a stakeholder, your local knowledge about our downtown streets is important.  
What challenges and opportunities need to be considered when designing a cycling corridor on downtown streets?  
Tell us by placing a sticky note on the map!



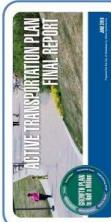
## Active Transportation in Saskatoon



The City of Saskatoon is committed to providing safe streets for users of all ages, abilities, and modes of travel. The Complete Streets Policy and Design Guide is a resource for the City to help plan streets that accommodate the safe movement of people by multiple modes and all ages and abilities. The principles of Complete Street design include:

- Serve and support existing and planned land use and built form context;
- Encourage more people to travel by walking/bicycling;
- Provide transportation options for people of all ages and abilities;
- Enhance the safety and security of urban streets;
- Create streets that offer mobility options for all users;
- Provide opportunities for improved health and recreation to people in the community;
- Promote the economic well-being of downtown areas;
- Create public space within the street corridor.

Adopted by principle by City Council on October 22, 2016. The Complete Streets Policy and Design Guide will help the City to better plan and maintain existing and new streets to effectively support movement of people of all ages and levels of mobility.



The purpose of Saskatoon's Active Transportation Plan (AT Plan) is to increase transportation choices within the city and establish a long-term vision for active transportation that complements the City of Saskatoon's key goals for improving walking and cycling in Saskatoon. The AT Plan identifies the key goals for improving walking and cycling in Saskatoon:

- ① **MORE walking and cycling**
- ② **SAFER walking and cycling**
- ③ **More PLACES for walking and cycling**
- ④ **Build a CULTURE for active transportation**
- ⑤ **ENCOURAGE active forms of active transportation**

Adopted in principle by City Council on June 27, 2016. The Growth Plan to Half a Million was adopted on April 15, 2016. The Growth Plan is about making choices to proactively manage the changes associated with growth, creating a city that is vibrant and attractive to future generations. A vibrant Saskatoon has a natural, and renewable opportunities that are universally accessible by all modes of transportation, including walking, cycling, transit, and driving.



The Growth Plan to Half a Million (Growth Plan) was developed over two and a half years through a wide public engagement process called Growing Forward Shaping Saskatoon. The Growth Plan is made up of several themes that, when pieced together, form a new growth model for Saskatoon:

- Corridor growth – Encouraging growth and development near existing major corridors
- Transit – Making transit more attractive to more people as an alternative to driving
- People as the Best Resource – Making the most of our existing road infrastructure
- Employment Areas – Ensuring we have the right amount of employment in the right areas
- Access to Services – Not only accessibility to services for households, but also accessibility for business
- Financing of Growth – Planning ahead for the costs of growth

Adopted in principle by City Council on April 15, 2016. The Growth Plan is about making choices to proactively manage the changes associated with growth, creating a city that is vibrant and attractive to future generations. A vibrant Saskatoon has a natural, and renewable opportunities that are universally accessible by all modes of transportation, including walking, cycling, transit, and driving.

## Active Transportation (AT) Plan | Bicycle Network Principles

### City Wide Cycling Network Principles

A well-designed cycling network needs to be visible, intuitive and provide connections between destinations and neighbourhoods. Ideally, a cycling network serves users of all ages and abilities – in other words, people from age 6 to age 80 – offering practical route options for those who are interested in cycling, but who may not be comfortable riding on busy streets with high traffic volumes and speeds.

**The design and development of a long-term bicycle network for Saskatoon is based on five network planning principles:**

- 1 **Provide an interconnected system of facilities that is CONFORTABLE and attractive for all users.**
- 2 **Increase COVERAGE to ensure all residents are within 400m of a designated bicycle route. The designated route may include both AAA and non-AAA facilities.**
- 3 **Focus on high-quality CONNECTIONS to and from downtown with all areas of the city and create a downtown network.**
- 4 **Provide a network that provides direct ACCESS to major shopping centres, key employment areas, schools, and recreational areas/facilities.**
- 5 **IMPROVE and connect to existing cycling routes.**

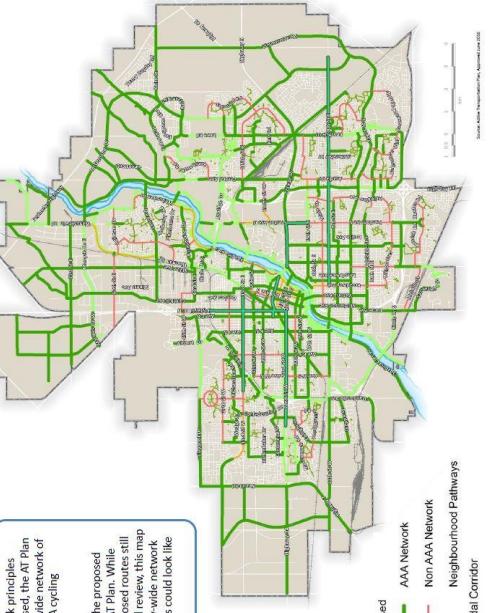
### AT Plan Network Facility Types



## Active Transportation plan | Proposed Bicycle Network

Using the network principles previously discussed, the AT Plan identified a city-wide network of AAA and non-AAA cycling facilities.

This map shows the proposed routes from the AT Plan. While many of the proposed routes still require a detailed review, this map shows what a city-wide network of cycling facilities could look like for Saskatoon.



## Existing Bicycle Network



## All Ages and Abilities (AAA) Bicycle Network Principles

### COMFORT

Attention to user comfort is an important part of attracting more people to bicycling as a mode of travel.

An All Ages and Abilities Network should:

- ✓ Minimize and consolidate conflict points between modes (for example, at intersections or driveway crossings).
- ✓ Reduce speed and enhance visibility at intersections and conflict points.
- ✓ Provide each mode with a clearly defined space for travel.
- ✓ Provide consistent treatments to promote predictable behavior for all users.
- ✓ Ensure facilities are easy to maintain to facilitate safe cycling conditions.

People who ride bicycles need a network of continuous low-stress routes that provide connections to local and city-wide destinations.

An All Ages and Abilities Network should:

- ✓ Separate bicycles from motor vehicles when speeds are over 30 km/hr and traffic volumes exceed 1,500 vehicles per hour.
- ✓ Ensure the amount of delay for people riding bikes is reasonable and balanced with other users.
- ✓ Minimize encounters between people riding bikes and those driving vehicles.
- ✓ Accommodate side cycling and passing movements, where feasible.
- ✓ Provide smooth vertical transitions and pavement surfaces free from obstructions.

### CONNECTIVITY

People who ride bicycles need a network of continuous low-stress routes that provide connections to local and city-wide destinations.

An All Ages and Abilities Network should:

- ✓ Provide direct and convenient connections that minimize detours.
- ✓ Connect to local and city-wide destinations.
- ✓ Integrate into the larger multimodal transportation network.
- ✓ Provide seamless transitions between different types of cycling facilities (for example: from a paved cycle track to a multi-use pathway).
- ✓ Ensure key destinations and regional routes are interconnected with the bicycle network.

### Downtown All Ages and Abilities (AAA) Bicycle Network

### SAFETY

People riding bicycles are vulnerable road users because they have less protection and travel more slowly than motor vehicles.

An All Ages and Abilities Network should:

- ✓ Linkages to surrounding areas
- Corridors providing better linkages across major barriers such as busy streets and river crossings should be preferred.
- ✓ Linkages with other bicycle facilities
- Corridors that offer a strong potential for interconnection with existing and planned City bicycle facilities and interconnections should be preferred.

Corridors in which a large number of existing and potential bicycle trips originate and terminate should be preferred.

Current and potential bicycle traffic

- ✓ Separation of high overall traffic volumes from high bicycle traffic potential for legal stopping should be strongly preferred.
- Separation on such corridors will provide the greatest benefit to cyclists.

Conflict with vehicles

- ✓ Corridors with fewer numbers of turning movements at intersections, driveways, and lanes should be preferred.

### Merits Consideration?

Street	Reason for Exclusion	Merits Consideration?
5th Avenue, Street and 22nd Street and 25th Street	<ul style="list-style-type: none"> <li>• does not connect well to the south end of the study area</li> <li>• highly residential in nature</li> <li>• low number of city-wide destinations</li> </ul>	
6th Avenue, Street and 24th Street and 25th Street	<ul style="list-style-type: none"> <li>• only extends for one block within the study area</li> </ul>	

### Evaluation Criteria

#### Bicycle Network

##### What do you think?

Tell us which of the 12 are most important to you by placing a dot in the corresponding box. You may put as many dot votes on each item as you think important.

##### What do you think?

Tell us which of the 12 are most important to you by placing a dot in the corresponding box. You may put as many dot votes on each item as you think important.



#### Evaluation Criteria

##### Transit

When assessing the appropriate streets for a AAA cycling facility, it is important to consider the impacts to all users in the Downtown. To assess these impacts, 12 criteria are being considered.

Tell us which of the 12 are most important to you by placing a dot in the corresponding box. You may put as many dot votes on each item as you think important.



#### Evaluation Criteria

##### People Walking

Pedestrian improvements

Tell us which of the 12 are most important to you by placing a dot in the corresponding box. You may put as many dot votes on each item as you think important.



#### Evaluation Criteria

##### Business

Parking

Tell us which of the 12 are most important to you by placing a dot in the corresponding box. You may put as many dot votes on each item as you think important.



#### Evaluation Criteria

## Satisfaction with Session

Overall, how was your experience	42%	58%	58%	58%	
This was a valuable use of my time and energy.	33%	58%	58%	58%	
It was easy for me to participate in the process.	42%	58%	58%	58%	
The information was clear and understandable.	33%	58%	58%	58%	
I understood what was expected of me as a participant.	67%	25%	25%	25%	
The facilitator kept us engaged and focused.	42%	42%	42%	42%	
All participants were given the opportunity to contribute.	75%	17%	17%	17%	
I believe that my voice mattered in this conversation.	33%	58%	58%	58%	
I understand how my input will be used.	33%	50%	50%	50%	
I will likely accept the outcome of this process, regardless of what decision that is made.	25%	25%	42%	8%	